สื่อการเรียนการสอนออนไลน์วิชาการประกอบเครื่องคอมพิวเตอร์และติดตั้งซอฟต์แวร์

E-learning online for Assembling Computer Components and Installation Softwares

Submitted By :

1. Mr. Amornsak Phuangthong

2. Mr. Nutdanai Hongcharuen

This project is Partial Fulfillment of the Requirement for Graduate Diploma

In Higher Vocational Education

Business Computing Major

Attawit Commercial Technology College

Academic Year 2019

Name of Project (in Thai): สื่อการเรียนการสอนออนไลน์วิชาการประกอบเครื่องคอมพิวเตอร์และติดตั้งซอฟต์แวร์

Name of Project (in English): E-Learning online for Assembling Computer Components and Installation Softwares

Group Members : 1. Mr. Amornsak Phuangthong Student Code 36884 Level EP.2

2. Mr. Nutdanai Hongcharuen Student Code 37773 Level EP.2

.....

This Project is accepted by the Business Computer Department, Attawit Commercial Technology College in partial fulfillment of the requirement for the Higher Vocational school, Major in Business Computing.

.....
(Ms. Ohmar Thwin)
Advisor

.....
(Ms. Thitirut Naiyapat)
Co-Advisor

.....
(Mr. Ditprapod Suwannasart)

Head of Business Computer Department

Abstract

Name of Project (in Thai): สื่อการเรียนการสอนออนไลน์วิชาการประกอบเครื่องคอมพิวเตอร์และติดตั้งซอฟต์แวร์

Name of Project (in English): E-Learning online for Assembling Computer Components and Installation Software

Group Members : 1. Mr. Amornsak Phuangthong Student Code 36884 Level EP.2

2. Mr. Nutdanai Hongcharuen Student Code 37773 Level EP.2

Committee Members :

Advisors : Ms. Ohmar Thwin

Co-advisor : Ms. Thitirut Naiyapat

Department : Business Computer

Institution : Attawit Commercial Technology College

……..

Abstract

The purpose of this E-Learning online for Assembling Computer Components and Installation Software to teach about Computer, Software, Installation System, how to assemble a computer and other Computer knowledge. The learners can learn about Computer knowledge. The learners can evaluate their knowledge by taking the tests who register and login to do the test.

This website for E-Learning online for Assembling Computer Components and Installation Software has been developed with Adobe Dreamweaver CC together with designed the website by Adobe Photoshop CC.

This website was written in English. This website can improve English skill and it is helpful for your real live communication in English.

Acknowledgement

We thank to board of committee members who introduced to develop this E-Learning online for Assembling Computer Components and Installation Software. This project may not be completed if we did not have any suggestions and supports from our advisor and co-advisor. We would like to give a special thanks to our advisor Ms. Ohmar Thwin, and co-advisor Ms. Thitirut Naiyapat who gave us suggestions and help to solve every problem successfully.

We would like to thank to all teachers from Business Computer department who taught and gave the knowledge of how to develop the website and other computer subjects which can apply in developing our system. We would like to give great thanks to our friends who shared knowledge, time and helps to complete this project successfully.

Finally, we would like to thank to our parents and family who cared with true love and support to complete the project successfully.

Team prepared

18 December 2019

Introduction

This project provides guidelines to people who interested in developing an E-learning website. The website has been developed by using Adobe Dreamweaver CC and Adobe Photoshop CC.

There are seven chapters and five units in each chapter. In each chapter, there are explanations about usage of Computer as well. There is a pre-test which involved the mixed knowledge from all seven chapters and there are post-tests for each chapter.

The developers hope that this website will be useful for the learners who interested in Assembling Computer Components and who wants to Practice the skills to install softwares. The website makes the learners to be convenient as they can learn the lesson from anywhere and at any time they want.

Team prepared

18 December 2019

Contents

Contents (Cont.)

List of Pictures

List of Pictures (Cont.)

List of Pictures (Cont.)

List of Pictures (Cont.)

Page

List of Tables

Chapter 1

Introduction

1.1 Background Information

E-learning or Electronic Learning is the concept of a kind of teaching media that has played a role in leaning and teaching through online by applying advance computer technology. Therefore, the developers have created Web-based system of teaching and learning systems through computer networks.

The subject is Assembling Computer Components and Installation Software Subject which has code no. 3204-2001 is one of the main subjects in the business computer major which gives the knowledge about selection to buy computer, solving problems, installation software and assembling a computer etc. The people who do not have the expertise when it comes to assembling a computer or installing software may cause errors during the operation. The organizers saw these problems and, thinking of creating an E-learning website for the Assembling Computer Components and Installation software, and think to develop the website that has the knowledge about the Computer Components, how to assemble the computer, how to install the software and other relevant knowledges about computer.

From the foregoing, the organizers want people to learn conveniently about the importance of computer assembly and software installation through on-line system conveniently and created the teaching and learning website that has compiled information relating to computer assembly and software installation. In order to allow interested people to study, find information from our website and apply the knowledge gained in daily life.

1.2 The project's objectives

1. To present the assembling Computer Components and Installation software in the website form
2. For those interested in learning through our website
3. To gather important knowledge and information on the website
4. In order to educate people from our website

1.3 Scope of the Study

1. To create online lesson content for all 7 lessons
2. To create a Login to access the system of website
3. To create a test before studying and after studying online
4. To create a Register System

1.4 The benefits expected to be received

1. Get a complete e-learning website
2. To practice writing code related to website
3. To use skills and abilities to make website
4. To made known to the unity of the people in the group

1.5 Time schedule for developing project (Gantt Chart)

List term 1	June 62				July 62				August 62				September 62				Date
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Student project training		↔															11 -12 JUN 62
Proposed project topic (Chapter 1)		↔															14 JUN 62
Announcement of topic results			↔														17 JUN 62
Proposed project topic			↔														19 JUN 62
Announcement of topic results				↔													21 JUN 62
Register online topics, present a joint advisor.			↔	↔													18 - 30 JUN 62
Send document Chapter 2					↔												8-14 JUL 62
Send document Chapter 3						↔	↔										18-31 JUL 62
Examination presentation of project topics										↔							17 AUG 62
Announcement of test results											↔						22 AUG 62
Send progress 50%													↔				9-15 SEP 62
Send progress 60%															↔		16-22 SEP 62
Send progress 70%																↔	23-30 SEP 62
List term 2	**November 62**				**December 62**				**January 63**				**February 63**				**Date**
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Send progress 90%	↔																1-8 NOV 62
Send progress 100%		↔															9-13 NOV 62
Project presentation exam			↔														7 DEC 62
Announcement of test results						↔											11 DEC 62
Send document Chapter 4										↔							6-19 JAN 62
Send document Chapter 5											↔						20-26 JAN 62
Send budget for the project												↔					26-30 JAN 62
Send a CD, book													↔	↔	↔		1-20 FEB 62

Table 1.1 Time schedule for the developing project (Gantt Chart)

1.6 Tools

1. The Program Adobe Dreamweaver CS6 to create the web design
2. The Program Adobe Photoshop CS6 to develop or modify the picture
3. The Program HTML Pad (2018) to create the code of website
4. AppServ language PHP to connect the web and Database
5. The Program Adobe Muse version CC (2018) to modify the website

1.7 Expected Budget

No.	The List	Quantity	Price (Bath)
1	Copy Paper A4 80 GSM.	2 Ream	238
2	Printing Ink	2 Bottle	670
3	Printer	1 Machine	2,000
4	Internet Service Fee	3 Month	300
5	Binding Values	1 book	250
6	Setting CD Box	1 Box	50
		Total	**3,150**

Table 1.2 Expect the budget to complete the Project

At present, education about computer assembly and software installation It's a story that isn't quite far away. Because it is a story that can be found in everyday life, May be made as a career or used in education Because at present, there are various technologies that help facilitate the study of information, Mostly, finding information will be in the form of reading in books and searching for knowledge via the internet Which some of them are media that provide information about non-fixed knowledge, Some books contain wrong and inconsistent information, Therefore may cause students to be confused And do not understand that information, The internet information Some websites may contain incomplete information and may be misinformation. And within the internet media, There may be images that do not match the information displayed on the website. Or have too few pictures And most of the information is not covered in the actual subject of computer assembly and software installation.

At present, there are many interested groups about computer assembly and software installation. But because the data collection source is not much information If there is any study or research, there must be an investment to buy the book to read. Come to study directly, Or read from websites on the internet, Or see from the media that those media There may be inaccurate and not interesting information for those who study it for sure. Because some information may not be available in that, Or there may be information but it is incomplete It means having to study some information that people who want to study may be buying books. Watch a video on how to assemble computers and install software.

Therefore, it can be seen that on the website of the teaching materials, some websites have unclear information. May have some knowledge that is missing Therefore, it may be necessary to develop in the area of important information to be more interesting. May put pictures or additional information that has been missing in the part so that the website will be teaching materials that have complete knowledge.

2.2 Problems that occur in the current work system

Education and learning through the internet system currently has disadvantages as follows.

1. The introduction of educational information media has some parts that cannot be adapted at present. Because the information is old and uncertain
2. Web page design is not interesting or contains more content and images than necessary. Which may make the reader bored
3. Images and data do not match Causing readers to be confused and not understand whether the subject is the same or not

2.3 Analysis and new system requirements

1. Start working Login to login

2. Check if your username and password are correct.

3. If not, please log in to the new system.

4. If selected to use the E-learning system

5. Do the Pretest

6. Attend E-learning lessons

7. Do the Posttest

8. Record the test

9. Show test scores

10. This work is already done

2.4 Theories and systems related work

Design related to the website

The website is a very popular medium on the internet. Which the website is a media that is completely in control of the user, that is, the user can decide which website to view and which website to choose. As needed Thus causing users to not tolerate the obstacles and problems caused by the wrong website design if users see that the website being viewed is not useful to him Or do not understand how this website will be used He was able to quickly switch to other websites. Because there are many websites today And there are also many new websites happening every day, so users have more choices And can compare the quality of various websites on their own

Beautifully designed website With convenient use Will receive the attention of users More than a website that looks chaotic There is a lot of information but can't find anything. It also takes time to display each page for too long. These problems are all caused by poor website design.

Therefore, website design is an important process in creating a website. To impress users Making him want to come back to the original website again in the future Which in addition to having to develop a good website is useful Must also consider competing with other websites as well

Elements of website design

Website design for efficiency And able to attract people's attention well Must have complete website elements including.

1. Simplicity, easy to understand

Good website design Must focus on simplicity primarily By choosing to present only what you really want to present in a variety of formats Which may be color, graphics, animation or characters Importantly, there must be a presentation that doesn't look too cluttered. In order not to cause a feeling of clutter or create boredom, the developers.

should design the website with consistency to have a graphic style, color scheme, and various decorations for each page on the website to be similar And in the same direction throughout the website as an example A general website that will notice that every page of that website Will emphasize the decoration in all the same style Each is only a presentation of each page.

2. Create outstanding unique

Website design to be able to convey the purpose of the website presentation Must have a unique and distinctive feature for the website To be able to reflect the nature of the organization as much as possible By creating such a identity, it may use color combinations, images, letters or graphics. In addition, it depends on whether Is the official website? In order to design the most appropriate

3. Content must be good.

Content is the most important thing of creating a website. Because of what makes people interested And always keep track of those websites Is content that is complete and interesting In addition, there must be improvements. Develop content on the web to be up-to-date. Including information must be as accurate as possible

4. Easy navigation system

Navigation system As a signpost for users No confusion while using the website The navigation design must be focused on simplicity, ease of use and easy understanding. Importantly, there must be a consistent placement position in order to look the same way. Makes users or viewers feel impressed And easier to remember the website For those who use graphics in navigation systems Will have to choose graphics that can communicate well

5. Website quality

A good website must have quality. Both what is visible on the website Whether it is graphics, type of characters, pictures or colors used Content that is displayed Which if the website has quality, it will.

create credibility And is a highlight that makes most people interested Therefore do not neglect the quality

6. Ease of access

The website should provide convenience to users. That is, it must be displayed in all operating systems Whether it is a web browser, notebook computer or mobile phone Importantly, there must be a resolution of the display and can be used without problems as well.

7. Design stability

Website design should be stable in design. By creating a website with the same pattern And carefully compiled content Make the web reliable And looks quality Help create a good impression for the user.

8. Work stability

The working system on the website must be stable. And can use well Which in addition to designing a modern and creative work system Must always check Because if the system is abnormal, it will solve the problem immediately In addition, the design may be updated more frequently so that users can enjoy using the website.

Website structure

Website structure design Can do many types Which depends on individual preferences and aptitude It also depends on the target group that wants to present. Because it must be designed to suit the usage of the target group as much as possible The structure of most websites will consist of 4 forms as follows.

1. Sort structure

Sort website structure Will be a normal structure that is most commonly used Because it is easy to organize information systems And able to present the story sequentially as well Suitable for small websites With uncomplicated content Most of them are websites that provide knowledge. Or small corporate website By linking content Will link one page at a time There is a direction to enter various content in a straight line. Use the forward-back button to determine the direction. Thus making use easy But the sorting website structure has disadvantages Is to allow users to waste time accessing content because they cannot determine the direction to enter content on their own

Fig. 2.2 Sort structure

2. Hierarchical structure

Hierarchical structure Commonly used with complex web data In order to be able to access information more easily by dividing the content into sections And a small detail is presented Making it easier for me to understand the content structure By having the homepage as the starting point And the only point that will lead to the linking of content from top to bottom

Fig. 2.3 Hierarchical structure

3. Table structure

Table structure Is a complex website design structure But there is a certain degree of flexibility In order for users to be able to access various content more easily, this type of design will link the content in each section. Enabling users to change directions Or can determine the direction of entering content on their own Therefore do not waste time It also makes the website more moder

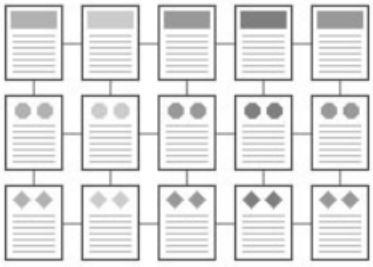


Fig. 2.4 Table structure

4. Spider web structure

Spider web structure Is a very popular structure Because it has the most flexibility All pages are linked to each other. Makes it easy to access pages that you want And have more freedom In addition, it can link well to external websites.

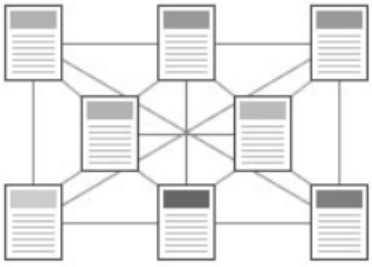


Fig. 2.5 Spider web structure

Website structure design

Website structure Is the order of the content on the website into a map that is easy to understand What content does the website need? Where is the webpage? Which pages will be linked together? Or simply Is like putting the storyline before writing the content perfectly Therefore, website structure design is very important. Which can be done in a variety of ways But there are key concepts The most popular 2 types are

1. Content-based Structure
2. User-based Structure

Important components on the page

On the page There are 3 important components that need to be included:

1. Header

Is at the top of the page and is the most important part Which must be able to attract viewers to feel like following the content on the website Which most often have a graphic image to look beautiful The main important thing is the logo, website name and main menu that can link to content on various web pages.

2. Body

In the middle of the page By displaying information about the content on the web roughly Which will contain text, graphics, tables, data or video And if there is a group-specific menu, it will be organized on this page as well And most importantly, the content in this section should be concise, easy to understand, using simple and orderly font styles

3. Footer

At the bottom of the page Which may or may not be This section shows various information. Additions such as messages that represent copyright Website owner information Contact methods and recommendations About the use of the website correctly, etc.

Application theory

1. **Adobe Photoshop CS5**

Photoshop is an Adobe family program that is used to decorate photos and graphics. Effectively Whether it is publications, magazines and multimedia work It can also retouching, decorating images and creating images. Which is becoming very popular now We can use Photoshop to decorate images, add effects to images and text. Making black and white images Making photos as paintings Bringing together images, retouch, decorating images We can learn how to use this Adobe Photoshop program by ourselves. You can easily edit images, decorate images in different formats easily. And what is indispensable is Entering text in the image as well And because Adobe Photoshop has developed programs continuously Therefore we need to study various commands to understand, but it's important when you learn to use commands in the old version You can still apply to the new version.

Fig. 2.6 Window of Adobe Photoshop CS5

Components of Adobe Photoshop CS6

1. Menu Bar is a collection of commands used for retrieving commands to manage image files or decorate images.
2. Options Bar is the part that is used to adjust the settings of the various tools. The settings in the options bar will change according to the tools used.
3. Toolbox is a tool used to store basic tools in the program, can run sub-tools by clicking the triangle in the bottom corner.
4. Title Bar is the section that displays the image file name that is enabled. For Adobe Photoshop CS6, the title bar is arranged in tabs.
5. Status Bar is a section that displays image-related features, such as percentages for zooming, image file expansion, image file size, etc.
6. Working area is the part used to create graphics. By opening the image file to edit on the work area Or draw a new image on the work area.
7. Panel for choosing colors Panels for adjusting brightness, etc. Each panel has different functions and uses. You can choose to open or close the panel from the Window command menu. Examples of popular panels.

2. Adobe Dreamweaver CS5

Adobe Dreamweaver is a program used to create and develop websites that have always been popular. Because it has features that are easy to use Users can arrange the elements of the webpage as needed, so those who have never created a website before can learn to use this program is not difficult.

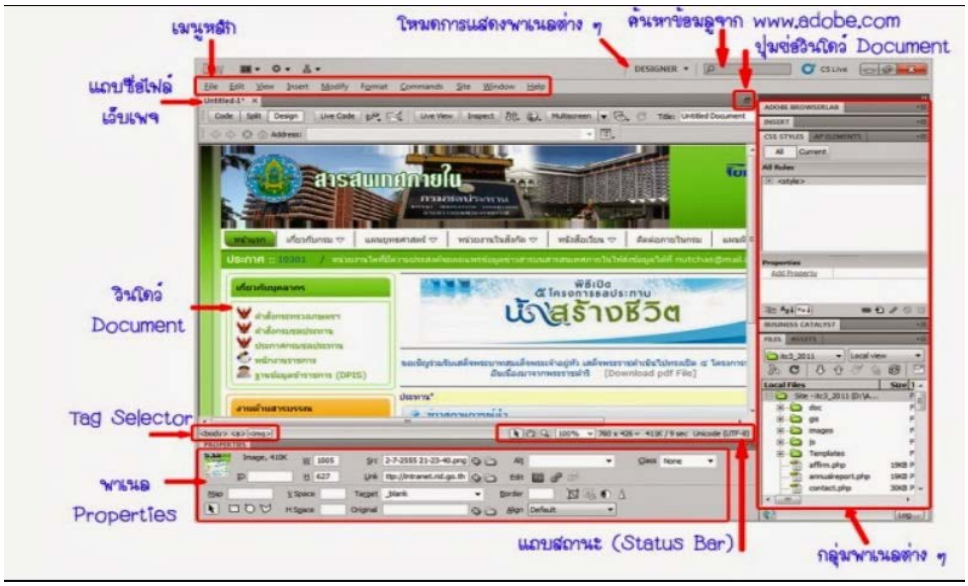


Fig. 2.7 Window of Adobe Dreamweaver CS

Components of Adobe Dreamweaver CS5

1. Application bar is an application bar Consists of application bar, consisting ofMenu bar

2. Is a combination of all the commands of Dreamweaver that are used to manage web page files.

3. Workspace is a button to change the workspace view (Workspace). You can choose which style you want to use. In Adobe Dreamweaver CS6, there are 11 options available.

4. Toolbar is a toolbar that is used to include commands that need to be used on a regular basis. It can enable / disable the tool bars.

5. The Insert panel is a panel that collects a group of commands that are used to create and insert objects. They are divided into groups. For easy use Example of active command group.

6. Panel Group is a small window panel That collects tools into groups according to their duties For specific use You can open or close the operation panel by clicking the Window command menu and clicking Select. Preferred panel.

Document Area is the area for creating web pages. Enter content And web page elements such as graphics, multimedia systems and codes that can be displayed in 3 different views: Code View, Split View and Design View.

Status bar is a bar at the bottom of the work window. Used to display additional information about the status Working on the currently running web page, such as displaying and selecting HTML tags, adjusting the display size. Determining the window size File size and loading time And displaying the language code of the webpage Active.

Panel Property is a panel located at the bottom of the program screen. Is the most frequently used part For use in customizing details and editing features such as size, position or color, etc. This panel will change according to the object selected for use on the web page. Example properties panel.

PHP theory

PHP was born in 1994 by American programmer Rasmus Lerdorf, inventing tools for his personal web development. Using the advantages of C and Perl, called the Personal Home Page, and creating a interface with a database called Form Interpreter (FI), including two parts called PHP / FI, which is the starting point of PHP. Visited his website and liked it, so he asked to use the code and used it to develop it in the form of Open Source after having become more popular within 3 years. There are websites that use PHP / FI in contacting the database and showing Result Dynamic and more than 50000 sites.

PHP2 (At that time, it was called PHP / FI) During 1995-1997, Rasmus Lerdorf had two other assistants, Zeev Suraski and Andi Gutmans, Israelis who updated Lerdorf's new code using C ++ to manage. Regarding the form, the data generated from the HTML language and supports the interface with the mSQL database management program, which makes PHP getting more and more quickly. And began to support more PHP applications. By the end of 1996, PHP was deployed around 15,000 websites worldwide and increased Later, another 3 people who helped develop Stig Bakken, responsible for the ability to contact Oracle, Shane Caraveo was responsible for PHP on Window 9x / NT, and Jim Winstead was responsible for detecting various defects. And changed the name to Professional Home Page in version 2

PHP3 Debuted between June 1997 and 1999, reaching the eyes of programmers The feature is that it supports both Windows 95/98 / ME / NT, Linux and Web server operating systems like IIS, PWS, Apache, OmniHTTPd. It supports a variety of database systems such as SQL Server, MySQL, mSQL, Oracle, Informix, ODBC

PHP4 Since 1999 - 2007, which has added a lot of functions and functions to be easier, Zend, with Zeev and Andi Gutmans, co-founded (http://www.zend.com). This version is a compile script which In this version of the page, it will be embed the script interpreter. Currently, PHP has over 5,100,000

users. Worldwide, developers have set up a new PHP name, PHP: Hypertext Preprocessor, which means that there is a stereotypical performance for Hyper. Text

HTML theory

The HTML language is based on the HGML language. (SGML : Standard Generalized Markup Language) Which is the language that is only applicable to the type of computer. What HTML is derived from HGML is the declaration of values and formulation of documents. (DTD: Document Type Definition) In the year 2533 (1990), Mr. Tim Burners-Lee Of the European Center for Physics Laboratory (CERN: Conseil Europeen Pour La Recherche Nucleaire) Which is located in Geneva Switzerland Has determined that To create a media that scientists can publish their work And can be used 24 hours a day and create computer languages that support local languages That does not depend on the system of the computer (Platform) or any network system, then has spread out, so this system has named that is known as World Wide Web to date

1990 (1991). The internet was born and raised. Along with many computer languages and protocols to support The rapid growth of the Internet One of the computer languages and protocols is HTML. And even though the World Wide Web is just a part One of the internet But highly popular and fast. The Http protocol, a subset of the TCP / IP protocol, was developed to support HTML language. Which is used to store documents on the World Wide Web has been developed and used widely Thus creating standards in determining different versions

HTML 1.0 Occurred in 1993 (1993), Mr. Tim Burners-Lee and Mr. Dave Raggett Has determined that the improved HTML language document must not make the document created unreadable “Any standard must not make exiting documents (As Far As Possible)

HTML 2.0 Occurred in 1995 (1995) developed by IETF (International Engineering Task ForceX), which aims to enable the display of web browsers that are commonly used. Accepted as a complete standard However, Netscape and Microsoft companies add new commands. Into their own program To allow page designers to use other functions In addition to HTML 2.0

HTML 3.0 Occurred in 1995 (1995) developed the HTML language to be able to increase by adding work on the table. Adjust the text around the image and show the complex parts well. As

well as allowing the web browser to go back and look at the previous pages that had previously been viewed better than HTML 2.0 or called the "Backward" button

HTML 3.2 Occurred in 1996 (1996), adding sub-elements (Element) And features (Attribute) That can work with many web browsers

HTML 4.0 Occurred in 1997 (1997). The increasing demand of designers makes the W3C organization agree to apply. With the ability to use new commands Helps the page designer Can control the document format Increasing work efficiency with CSS (CSS : Cascading Style Sheets) Embedding the object of the add-on program to display Pictures and sounds Form creation Can be improved and used in conjunction with Scripting Language Is to write a short statement called Script Various ways to allow web pages to interact with More users By the script written Must be inserted in the HTML language, but the web browser must support the HTML 4.0 function with the ability to manipulate the object model

Color theory

Color means the impact on the eyes to be seen as a color that affects psychology. Is the power to create the intensity of light that emotions and feelings Seeing the color from the eyes, the eye will send the feeling to the brain, causing various feelings according to the influence of color. Such as freshness, heat, excitement, sadness, color is very meaningful, because artists want to use color as a medium to create impressions in the works of art and reflect that impression to be born to human viewers associated with various colors at all times because everything is All around, there are many different colors. Color is something that should be studied for self-interest and Creator of painting works because The story of that color is a science. Should understand science The color will

achieve more work. If you do not understand the color reasonably well If studying the color is good enough The art will be very complete.

Fig. 2.8 The picture shows the color cycle caused by mixing the colors together.

The color circuit is the color that is produced by mixing in pairs, starting from 3 colors and then creating a new color until the complete cycle. All 12 colors will be divided into 3 colors.

Color Step 1 is the color of the color, ie red, yellow, blue.

Fig. 2.9 Primary Colours

The second color is the color caused by the 1st color or the color of the mother in the same ratio. Will cause 3 new colors Including red, mixed with yellow, orange, red mixed with blue, purple, yellow mixed with blue, green

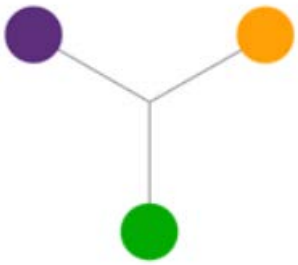


Fig. 2.10 Secondary Colours

The third color is the color caused by the color. Step 1 is mixed with the second color in the same ratio. The other 6 colors are Red, mixed with orange, orange, red, red and purple, purple, yellow, mixed with green Get green, yellow, blue mixed with green Get green, blue, blue, mixed with purple, purple, blue, yellow mixed with orange, orange, yellow

Fig. 2.11 Intermediate Colours

The fourth color can be obtained by mixing the colors that are opposite of the color circuit. If mixed in equal proportions, will be black or dark gray.

Fig. 2.12 Complementary Colours

But if mixed in unequal proportions, it will get a darker color such as75% orange, mixed with blue 25%. Can get a dark orange color that is similar to brown.

75% blue, mixed with 25% orange

75% reddish-purple, mixed with yellowish green, 25% will get a purple mole

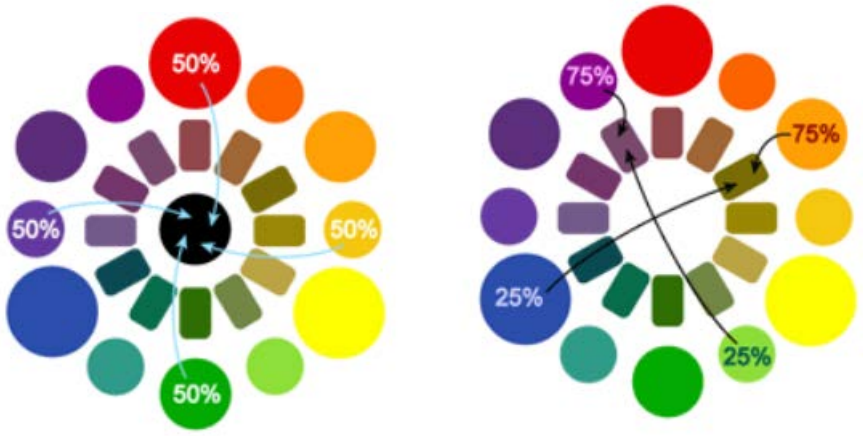


Fig. 2.13 Color combinations in unequal proportions

In addition, the color circuit also allows us to divide the color into two large groups: warm colors and cool tones. By Cool Colours Giving a calm, cool feeling , Warm Colours Feeling hot, excited

Fig. 2.14 Warm colors and cool tones

Intensity

Caused by the true color is the color caused by mixing in the color circuit Is the primary color that is mixed according to the rules and is not mixed with medium or other colors. It has the highest intensity Or the strongest Is the true value of the undiluted color When these colors In the midst of other colors that are mixed or darkened, darkened or changed The true color will show the strength of the color that appears clearly, which will create a focus on the work like this, like bougainvillea, fresh pink or fuchsia, which is surrounded by green leafy bougainvillea or flares. The bright spot in the festive season contrasts with the dark, dull colors of the night sky.

Value of color

Is the use of color by having different weight values at different levels and with many colors, if one color is Will look like monochrome Using the weight of the color Will cause harmony The distance is shallow, deep, if there are many weight values, the color will be more harmonious, but if there are only 1 - 2 levels apart Will make a difference

Feeling of color

Different colors often have different meanings in many cultures and even Western societies. The meaning of different colors has changed over time. But in the United States, researchers have discovered the accuracy that each color is associated with the human emotions as follows.

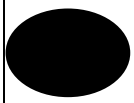
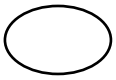
Color	Feeling
 Red	Giving the feeling of Passionate, aggressive, important
 Orange	Give the feeling of Playful, energetic, cheap
Yellow	Give the feeling of Happy, friendly, warning
 Green	Give the feeling of Natural, stable, prosperous
 Blue	Give the feeling of Serene, trustworthy, inviting
 Purple	Give the feeling of Luxurious, mysterious, romantic
 Pink	Give the feeling of Feminine, young, innocent
 Brown	Give the feeling of Earthy, sturdy, rustic
 Black	Give the feeling of Powerful, sophisticated, edgy
 White	Give the feeling of Clean, virtuous, healthy

Fig. 2.15 Feeling of color

Color and design

Using color and work out Where is the designer's aim? To create interest Excitement to viewers In order to reach the desired destination The main uses are as follows.

1. Using the same castes The meaning of a single caste (tone) Is the color group that is divided into the color wheel into 2 castes is warm tone Which consists of yellow, orange, red, purple, These colors give influence The feeling of excitement and excitement is considered a hot caste.

cool tone Consisting of yellow, green, blue, purple These colors look cool, giving a calm feeling. (Yellow and purple are both castes)

Using each color should use the same caste color in all images. Because it will make the image of unity (unity) harmonious, motivated to be very conformable

2. Use of different colors The general principle is to use the ratio of 80% to 20% of the color castes. If using 80% hot color color, the caste color is 20%, etc. This use creates the focus of the viewer. Should not use the same ratio because it will not make any color that is not attractive.

3. Using opposite colors The opposite color will give a strong contrast. Create dominance And can be very stimulating, but if not used properly or is not suitable or used too many colors Will cause the blurred vision, conflict, should use the opposite color in the ratio of 80% to 20%, or if there are equal areas that need to be used, bring white or black to add to the line to separate from each other or Another way is to reduce the freshness of the opposite color to tarnish. The opposite color has 6 pairs, namely

Yellow in contrast to purple

Red in contrast to green

Blue opposite to orange

Yellow-green, opposite to the magenta color

Yellow orange, opposite to purple-blue

Red orange color, opposite the blue green

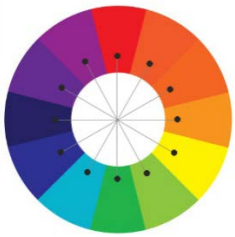


Fig. 2.16 Complementary Colors

Appserv Appserv program generator

For this AppServ program, there is no support from government agencies. Or any private or independent organization, but the AppServ program is born from inspiration from a friend of a developer who has started studying PHP and MySQL databases and has problems every time to install Than can be installed, it takes at least 3 hours, sometimes not possible. And every time the installer is unable to come to ask for help from the developer on a regular basis every time Therefore the developer has created a program that is convenient to install so that the friends of the developer can use it immediately. Without having to come up with a headache with complicated installation anymore During the first distribution The developer has distributed on the website in English. Foreign users are interested and have a lot of use. And at present, more in the Thai website section In the future, developers will create websites that can support all languages. And reach all users around the world

AppServ program developer history

For the developer, living in Thailand, Panupong Panyadee, nickname apples, was born on August 14, 1980, graduated with a bachelor's degree from Rajabhat Institute Chiang Mai Faculty of Science and Technology Computer Science Special experience and expertise in the areas of Linux Security, Linux Network, Network Security, Network Admin, PHP Programming, MySQL Database, Linux / Unix Hacking System, Web Design, etc. The operating system that chooses to use Desktop, select Windows. / Network only select Debian GNU / Linux

Definition of AppServ program

AppServ Is a program that brings together many Open Source Software.

With the main package as follows

– Apache

– PHP

– MySQL

– phpMyAdmin

AppServ differences in each version

AppServ has divided the version into 2 parts:

2.5.x Is a version that brings new packages especially for use Suitable for developers who need a new system Or want to test Try the new function. Which may not have the stability of the system 100% because the package from the developer is still in the testing phase Try to find errors.

2.4.x Is the version that uses the package that is essentially stable Suitable for those who want stability of the system without focusing on using new functions.

Database programming theory

Database program Is a program or software that helps manage information or items that are in the database Whether storing, retrieving, updating data The database program will help users find

information quickly. Which database program There are many common uses such as Access, FoxPro, Mysql, Oracle, SQL, Sever etc. Each program has different capabilities. Some programs are easy to use but will limit the scope of use or use with small databases. Some programs are more difficult to use. But will be able to work more or use with a large database Therefore would like to mention some popular database programs.

Dbase is another database program. The usage is similar to the FoxPro program. The data or reports contained in the files on the Dbase can be processed in Word Processor and even Excel can read the .DBF file. Created by the Dbase program as well

Access is a very popular program at the moment. Especially in small and medium sized database systems Can create a form that needs to browse the data in the database The main data from the data already recorded in the database. Will be able to search or browse information from any field The display may be displayed on the screen. Or can be sent out via the printer. In addition, Access also has a data security system. By setting a password to protect the security of data in the system as well

FoxPro is a database program that has a lot of users. Because it is easy to use, both the method of calling from the FoxPro menu and applying the program Programs written with FoxPro can be used with Dbase. The commands and functions in Dbase can be used on FoxPro. In addition, FoxPro also provides tools for writing programs, such as creating reports. Programs written with FoxPro can be converted into .EXE files as well as other language programs and can be used with other computers without the need for the FoxPro structure on the device.

Oracle program, the word Oracle means Object - Relational Database Management System (ORDBMS) Have the ability to work in both Rational formats and some properties of Object Oriented are products from Oracle And also the first commercial RDBMS in the world. Oracle is also a Database Sever RDBMS with outstanding capabilities in database management. With the highest reliability (reliable) And Rollback Segment technology that can handle data in the event of a

system failure Or the system is unable to service With Rollback Segment technology, it will manage Instance Recovery data without causing any damage due to system failure.

Microsoft SQL Server program is another Database Sever level RDBMS that is most popular in modern times. And is considered the first Microsoft software to use technology .NET Is a technology that allows us to present information to Application for Windows Or through the internet network more generally MS-SQL Server Will work with the operating system Windows2000, 2003 Server In order to use MS-SQL Server Is a database for making systems Client / Server

The importance of database processing from data collection as a database will result in the following benefits:

1. Can reduce data duplication Collecting the same type of information for many causes of duplication (Redundancy) Therefore, the data is collected in the database. Will help reduce the problem of data duplication By database management system (Database Management System : DBMS) Will help control duplication Because the database management system will know at all times where there is redundancy.

2. Avoid data conflicts If the same type of data has been collected for many places and the same information has been updated But not fully updated anywhere where data is stored, it will cause problems of the same type of information May have different values in each location where the data is stored Therefore causing a conflict of information (Inconsistency)

3. Can share information The database will collect data together. Therefore, if the user wants to use the data in the database that comes from various data files, it is easy to do.

4.Can maintain the accuracy of the data. Sometimes it is found that storing data in the database may have errors, such as from the input of the wrong input data is entered from one number to another number. Especially in cases where many users have to share information from the database

If any one user corrects the wrong information, it will cause others to be affected as well. In the database management system (DBMS), you can enter rules to control errors that occur.

5.Can set the same standard of data Collecting data together in a database will enable the standardization of data as well as various standards for storing data in the same manner. Such as determining the writing style, date in day / month / year or year / month / day. There will be people who manage the database that we call Database administrators (Database Administrator: DBA) define standards6. Able to set data security systems, security systems now To prevent unauthorized users from using Or come to see some information in the system Database administrators will be able to determine the level of data usage of each user as appropriate.

7. Data independence In the database, there is a database manager that acts as a link to the database. Programs may not need to have a data structure every time. Therefore, editing information sometimes Therefore may only be used with programs that use changed data For programs that do not use such information Will be free from change

4. Basic principles in instructional design

In the design of teaching and learning, there are basic principles that instructional designers should consider in order to help design the quality of teaching and learning as follows. (Gagné, Wager, Golas, & Keller,2005, pp. 2-3; Smith & Ragan, 1999, p.18)

4.1. Taking into account the learning outcome of learners is an important goal. Teaching and learning design aims to promote the learning process. More than the teaching process Instructional designers must consider the learning results clearly. To be used as a guideline for teaching and learning process selection Teaching activities that help learners achieve effective learning outcomes.

4.2. Considering factors that affect learning, including facilitating learning for learners when using teaching quality Attitude and learning ability of learners These factors should be considered in the design of teaching and learning.

4.3. Know how to apply the principles of teaching and learning, teaching methods, teaching styles To suit the age of the learner and the content To enable learners to be enthusiastic in learning and engaging in both physical and Intelligence and mind in teaching and learning activities

4.4. Use various methods and media Instructional designers should use media that helps learning to be effective. Consistent with learning objectives And differences in student learning which will help learners become more interested and enthusiastic about learning

4.5. With continuous development Quality teaching and learning should be developed continuously from planning. The actual trial And bringing the experimental results and suggestions from learners to improve teaching and learning to be more quality This continuous development will provide quality teaching and learning.

4.6. There are assessments covering both the teaching and learning process and student evaluation. In order to use the assessment results to develop teaching and learning to be more effective, efficient and more interesting. Should not only be intended to know the learner's learning results But should obtain information that is used to develop learners to achieve learning objectives

4.7. The teaching and learning elements are related. Teaching elements Such as learning objectives Teaching activities And evaluation Should have a consistent relationship And suitable for learners and learning contexts, allowing learners to achieve learning objectives that require basic principles in the design of teaching and learning As mentioned above, this is a general guideline for teaching and learning designers who have started working in this field and have applied it to the teaching conditions and context.

instructional design model

Instructional designers will use teaching and learning design patterns. (instructional design model) Is a tool or guideline for working to explain the elements of work or relationships of those elements to those involved or the team to understand the work process and to monitor the operation,

design style of study The teaching that is the basis of the system-based teaching design that is very popular is discussed here. include a common model of instructional design This format is developed from the concept of Mager. (Mager, 1975, p.2) Have set up the basic question for the instructional designer who must find the answer as follows

1) Where are we going? (What are the goals of teaching and learning?)

2) How can we achieve this goal? (What are the strategies and mediums?)

3) How do we know that the goal has been achieved? (What is the assessment tool? How do we evaluate and improve teaching materials?)

Based on the above questions, it is defined as an activity that must be performed in the process of designing the teaching and learning into 3 steps which are related as follows:

Step 1 Analysis of teaching and learning To set goals to go What the assessor should analyze is learning contexts, learner and learning task Or what students should know and should do

Step 2 Teaching and learning design In order to answer the question of how we can reach the goal, this step is a step that instructional designers must consider in various media and learning activities. Used to create experiences for learners In addition, consideration of priorities, presentation of activities and class management, such as how students learn Such as studying in large groups, small groups or individual classes, etc. This step is a step that designers need to consider how to proceed with teaching

Step 3 Assessment of teaching and learning In order to answer the question of how to know how to reach the goal, this step is an assessment of both teaching and learning results. Assessment can be divided into 2 phases: assessment during progress or progress assessment. (formative evaluation) And summary evaluation (summative evaluation) Is the assessment after the completion of the operation The progress assessment is intended to use information to improve teaching and

learning. The summary evaluation is intended to determine the results of the operation and determine the outcome of how the goals are achieved.

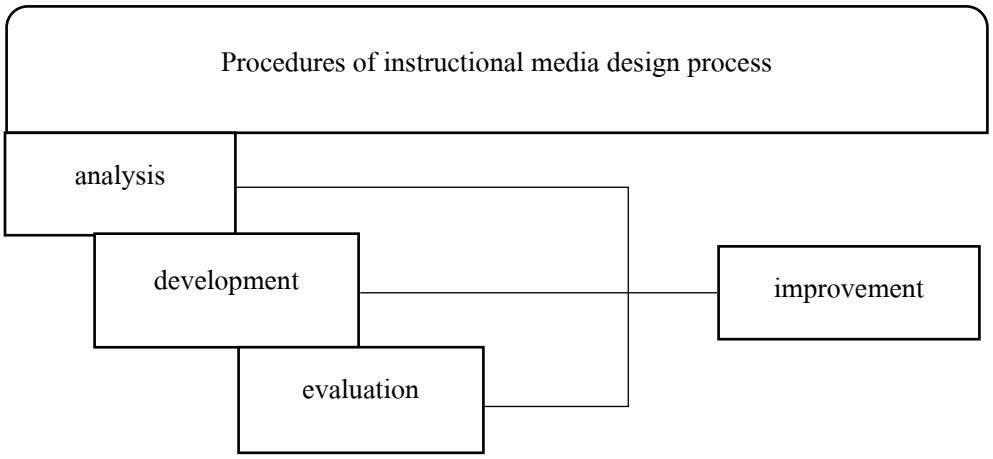


Fig. 2.18 Steps of instructional media design

ADDIE model

ADDIE model design consists of 5 activities in operation: analyze, design, develop, implement, evaluate) Which, when considered well, looks like a systematic problem-solving process Start by analyzing the problem (analyze) Presentation of solutions (design) Preparation for problem solving (develop) Experimental solution (implement) And finally evaluate the solution to the problem whether successful or not (evaluate) ADDIE Format Therefore is a model that can be applied in the design of teaching and learning in various matters Especially widely used in media design Teaching materials Such as the design of teaching packages, program design lessons, etc. As well as being used in the design of teaching and learning at the regional level Is the education system in the community and the design of teaching and learning at the classroom level to improve the learning outcomes of students in various areas

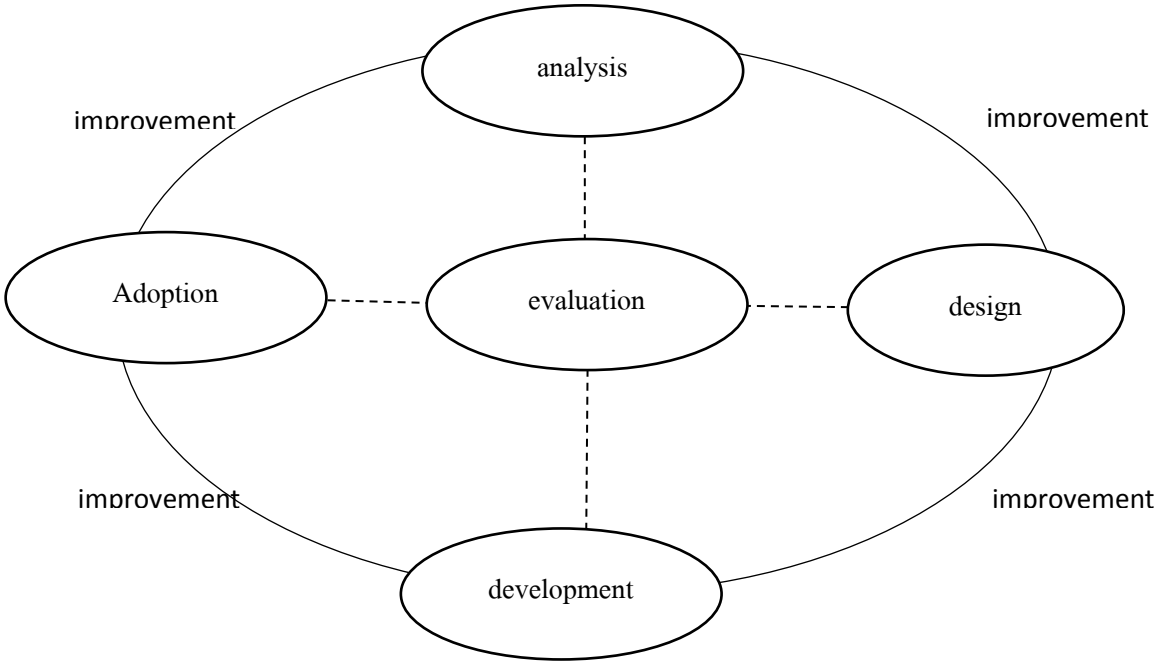


Fig. 2.19 Activity elements

Activities that must be performed in each step of the design of teaching and learning according to the model of ADDIE model are as follows.

Step 1: Analyzing activities performed at this stage are

1) Analysis of problems and needs in teaching or training

2) Analysis of environmental systems and organizational conditions To consider resources and obstacles

3) Study of population characteristics

4) Analysis of goals and objectives, which is what learning, such as learning content Learning skills Or learning that is a specific requirement

Step 2: Designing activities that perform at this stage are

1) Targeting Objectives that can be observed, measured

2) Ranking goals and objectives for easy learning and practice

3) Planning, evaluation, learning and practice

4) Consideration of instructional strategies to suit the content Grouping of students' activities in various ways in groups and individuals

5) Selection of instructional media

Step 3: Development of activities that perform at this stage are

1) Creating media / activities or teaching programs as designed

2) Test (try out) media / activities or teaching programs with target groups

3) Media updates / activities or teaching programs

Step 4: Implementation of activities performed at this stage are

1) Publishing media / activities or teaching programs created such as installation, maintenance, media Training for teachers to know how to use media / activities or teaching programs that are created. Providing advice and supervision in the use of media / activities or teaching programs

2) Assistance Encourage teachers to accept the media / activities or teaching programs that are created and use the media.

Step 5: Evaluation of activities performed at this stage are

1) Creating tools to assess media / activities or teaching programs as intended

2) Test (try-out) media / activities or teaching programs and evaluation tools with samples To diagnose learning outcomes caused by learners And gather information about the successes and failures in using the instructional programs created by friends To improve

3) Assessment after applying media / activities or teaching programs to groups

Demographics, design patterns, teaching and learning of Dick and Cary (Dick and Carey's instructional design model)

5. Database

Is the source that is used to collect data that is in the same file format. Including having a data dictionary Keep a description of the structure of the database. And because the information stored must have a relationship with each other, enabling it to be searched (retrieval) modified, Update the data structure (update) And arrange (sort) More convenient in the actions mentioned above Requires application software for managing databases The database system consists of 3 main components: database, Database Management System and people.

Database System

Is a system that collects various related information together in a systematic way. There is a clear correlation between various information, In the database, there are many data files containing data. Relate together in a systematic manner and allow users to use and maintain, protect these data Effectively, With software that is like a mediator between users and programs Related, to the use of a database called a database management system or DBMS (data base management system) It is responsible for allowing users to access information easily, conveniently and efficiently, Access to user information may be the creation of a database. Database editing Or asking questions to get information The user does not need to know about the details within the database structure.

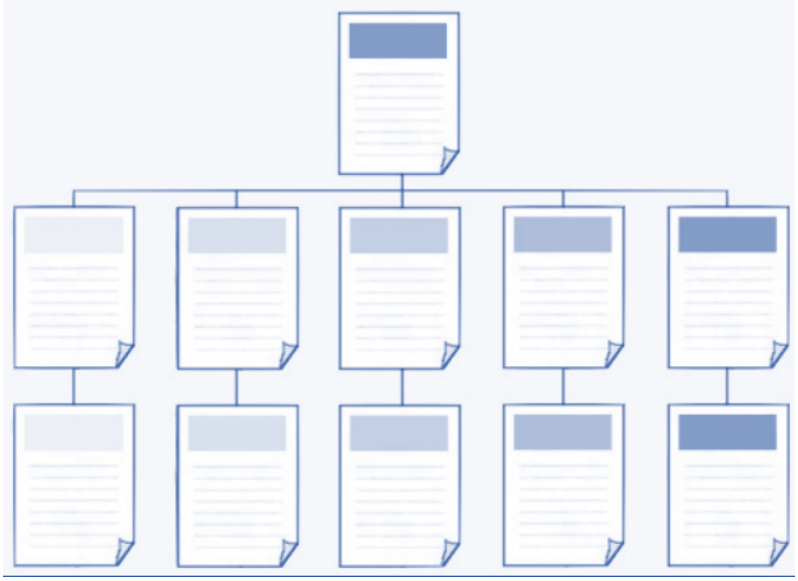


Fig. 2.20 Hierarchical data system structure

Due to the widespread use of database systems like this, When we apply to the information on the website, it will make users understand the structure of complex information on the website easily and quickly. Which is considered a structure that is suitable for the information on the web, because every day The website will always start from the home page. And then divided into sub-sections and with a hierarchical arrangement from top to bottom Allowing you to quickly define the

scope of content within the website By starting from defining the main topic of the data, And then choose to use the data system pattern (Organizational Scheme) That suits your data the most.

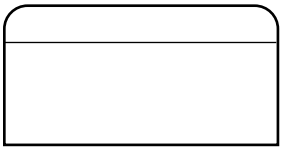
Principles of hierarchical data system structure design

1. Each data group should be clearly separated. There is no part or duplicate in the form of one type of information system. You have a duty to create balance in merging or excluding items into a particular group.

2. Considering the width and depth of the database system structure Here refers to the number of items available in each layer. Depth information refers to the number of layers of data in the structure. If the data structure is very narrow and deep Users have to click many times to access what they need. on the other hand If the database structure is very broad and shallow Users will have to face a large number of items in each menu.

Data stream symbol

Diagram showing the current flow of data (data flow diagram : DFD)

Symbol	Symbol Name
	Source Destination : Symbol of things outside the system
	Process : Evaluation symbol

	Data Store : Data collection symbol
	Data Flow : Data flow symbol

Fig. 2.21 Show the data stream symbol

Is a tool of system analysts that helps to understand the work processes of each agency, which is aware of the data transmission, coordination between activities, In the operation, the model of the system shows the flow of data, both input and output. Between the system and the source, including the destination of the transmission, which may be a personal department Or other systems depending on the work system and the coordinated work within that system, It also helps to know the need for information and defects (problems) in the original work system for use in the design of new system operations (Data Flow Diagram (DFD) Is a picture showing changes in data while flowing through various work processes Of the DFD Information System, Therefore is the structure of the information system that communicates the working system in the form of relationships between the data stream and DFD processes within DFD, Makes us understand the work components Understand the use of information in each process. And the data resulting from the process work, which the structure starts from a high level, which shows the parts that are outside the system.

This part is important because it is the part that says that the system Where has the information come from? And where and what results are sent? DFD, At a deeper level, will not show things outside the system Is that this is not a normal component, Will place the source of information on the left hand side of DFD And the external part that receives the results of the system will be on the right hand

side, In order to be in the form of data streams from left to right, But in many cases, we will place appropriate internal data and results Which may be above the process or under the process, DFD Second level (Low-Level Data Flow Diagram) Is the section that displays the subsystems from DFD, As mentioned above or called the mother level When the mother level cannot show all the details, Is required to break out the sub-level to show that processing according to the working procedure more clearly.

Definition of data structures

Data Structure Is the relationship between the data in that structure and the process of managing data in the structure Or preparing a format for storing data in memory in a orderly manner, instead of the data in the correct format, As well as the process of accessing information in the structure to be effective.

Structure or characteristics of data sets used in computer systems Caused by bringing various types of data together until becoming a structure, Data management in the internal computer memory To have a relationship within the data group to have a clear format or specification for determining qualifications, To create relationships within the data group Which has many forms such as ARRAY, LINK-LIST, STACK, QUEUE, TREE etc.

Data structure system arrangement (Information Architecture) In the process of developing websites that are going to be studied, the following relies on the principle of organizing a data structure called Information Architecture, In many parts, from the first step to the final step of the structure (Final Architecture Plan) Which is a very important process that will make the website achieve its goals.

Information system structure, considering what website should have information and work by creating a structure map before developing a web page, By starting with the target of the website and the target user group, then consider the necessary content and usage and then group it into a system,

Then it's time to design the data structure on the page to be ready to continue to design graphics and look.

Data structures, algorithms and theories involved in data structure design.

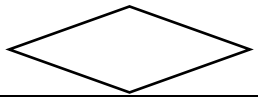
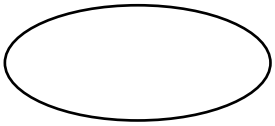
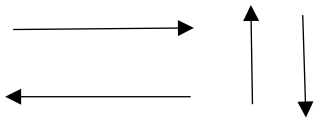
Symbol	Name	Meaning
	Termination	Symbol for beginning and end
	Process	Process symbols such as declarations, variables, additions, etc.
	Decision	Condition symbol
	Data	Symbols communicate with users by receiving information and displaying information.
	Manual Input	Symbols for receiving information from users
	Display	Display symbol on the screen
	Predefined Process	Sub-operation symbol or sub-function
	Connect	Connection point symbol
	Arrow	Operation route symbol

Fig. 2.22 Using symbols in database design.

2.5 Implementing computer systems in use

1. Use computers to decorate pictures, make websites, using Adobe Photoshop CS6.
2. Use computers to create websites using Adobe Dreamweaver CS6.
3. Use computers to make Banner and Logo.
4. Use computers to find information on the internet.
5. Using computers to write PHP language as a website development language
6. Use the computer to store And create Sever Appserv 2.5.10 program database

Chapter 3

Computer System Design

3.1 The Current System (Flow Chart)

Flow Chart for Registration

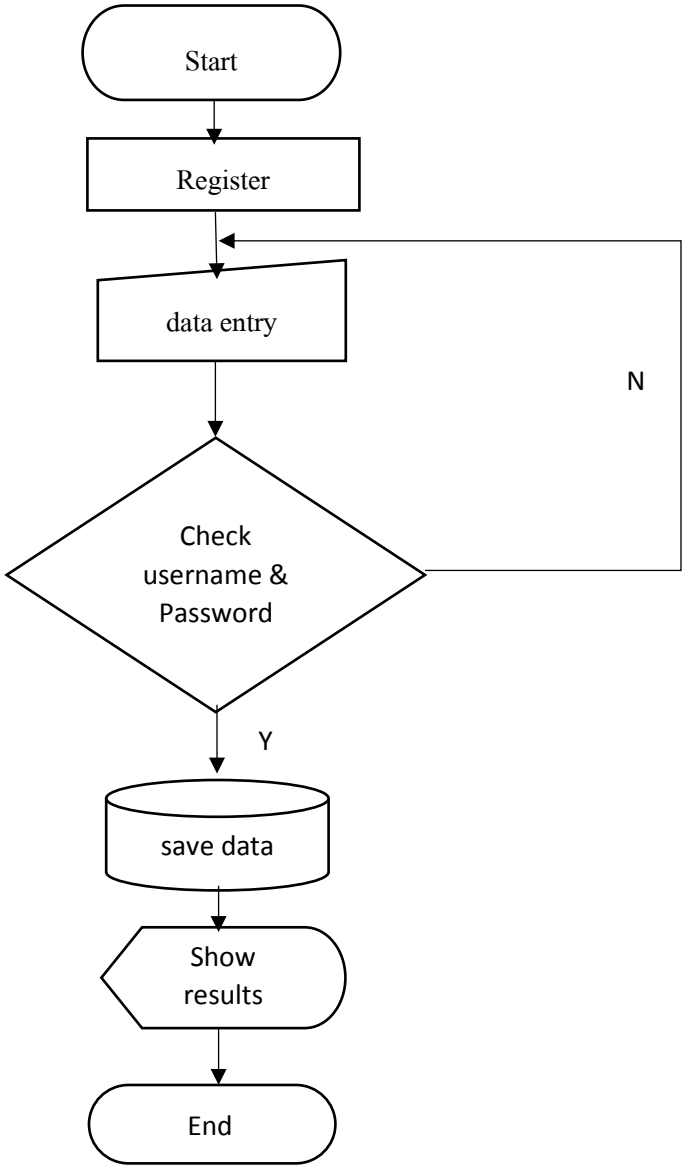


Fig. 3.1 Flow Chart for Registration

Login Flowchart

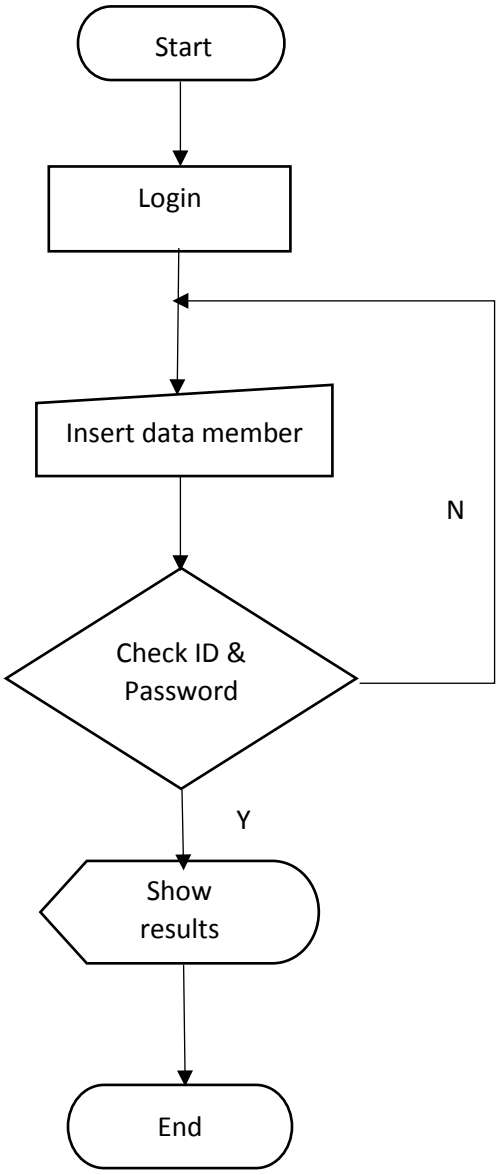


Fig. 3.2 Flow Chart Login

Lesson Flowchart

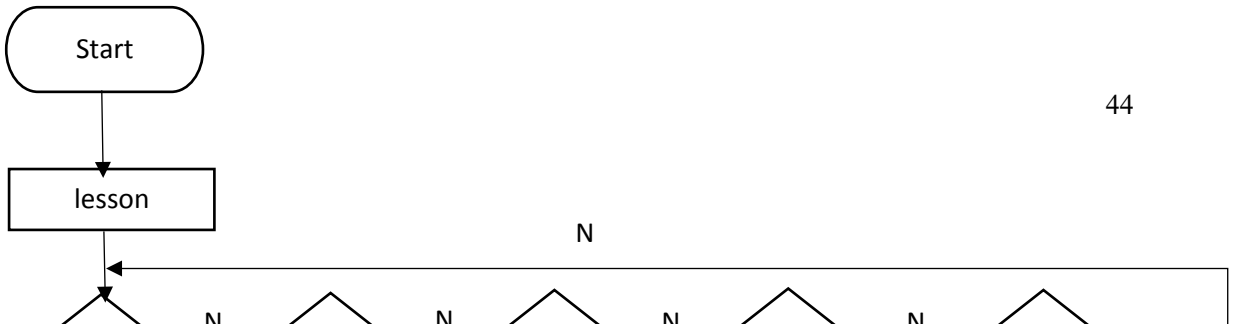


Fig. 3.3 Flow Chart for Lessons

Test Flowchart

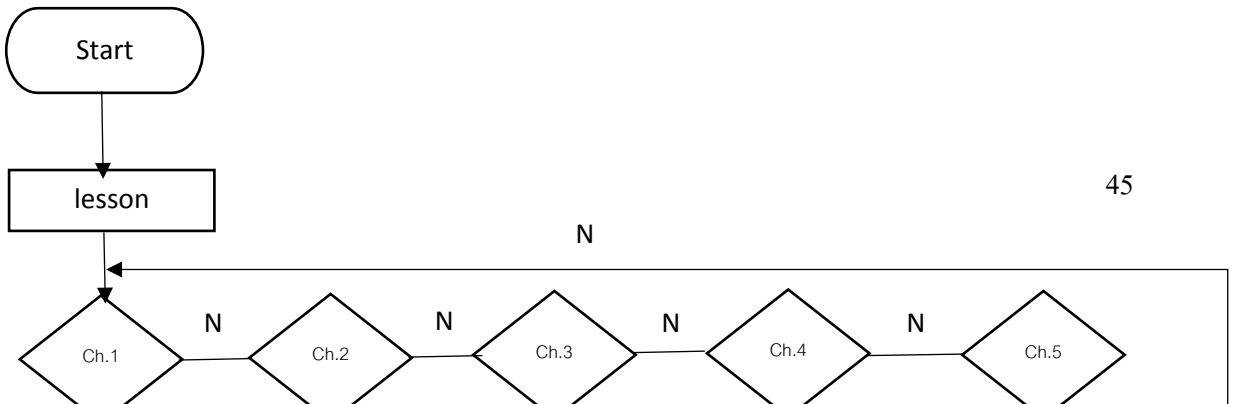


Fig. 3.4 Flow chart for Tests

3.2 Context Diagram

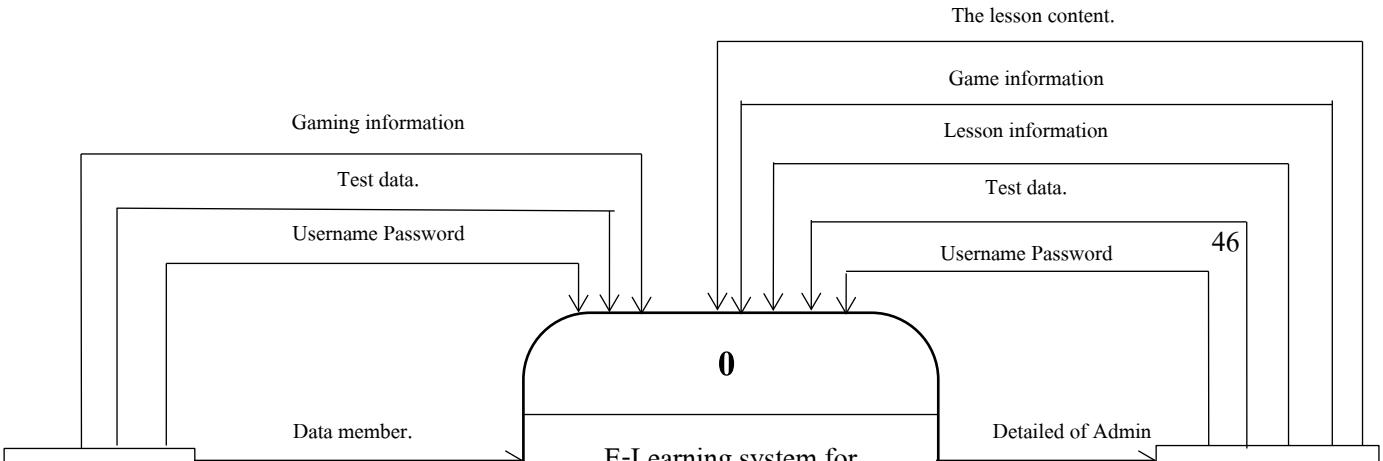


Fig. 3.5 Context Diagram

Data Flow Diagram Level 1

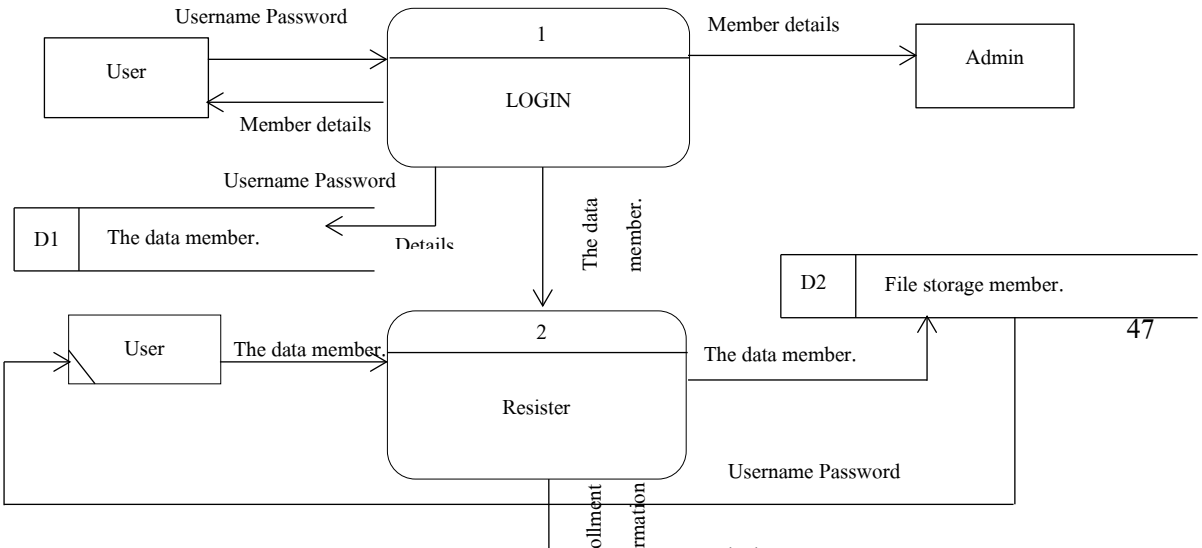


Fig. 3.6 Data Flow Diagram Level 1

Data Flow Diagrams Level 2 Process 1

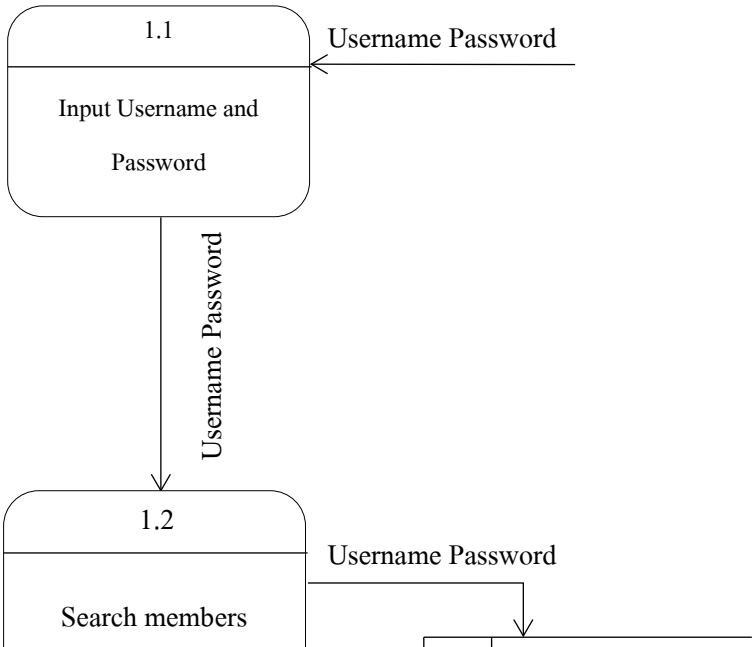


Fig. 3.7 Data Flow Diagrams Level 2 Process 1

Data Flow Diagram Level 2 Process 2

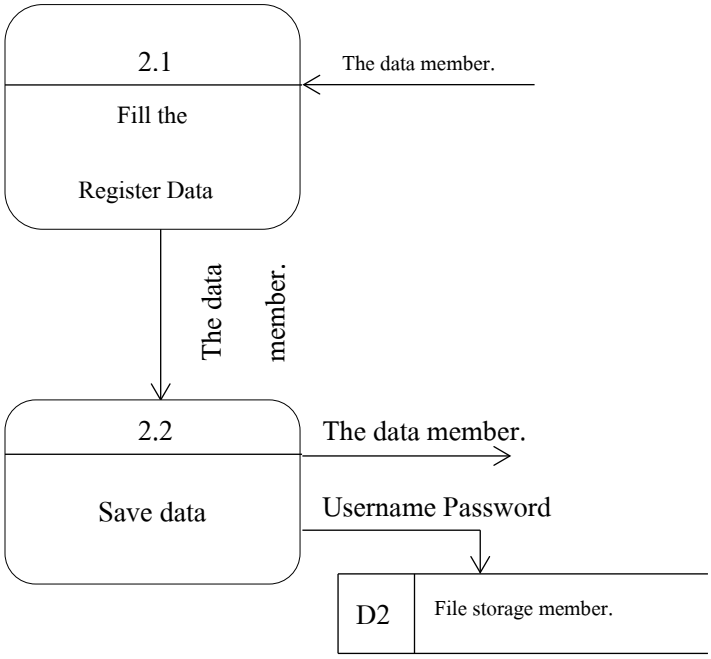


Fig. 3.8 Data Flow Diagram Level 2 Process 2.

Data Flow Diagram Level 2 Process 3

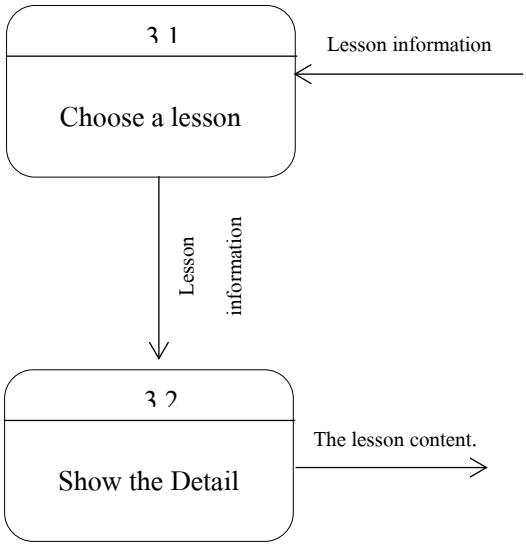


Fig. 3.8 Data Flow Diagram Level 2 Process 3

Data Flow Diagram Level 2 Process 4

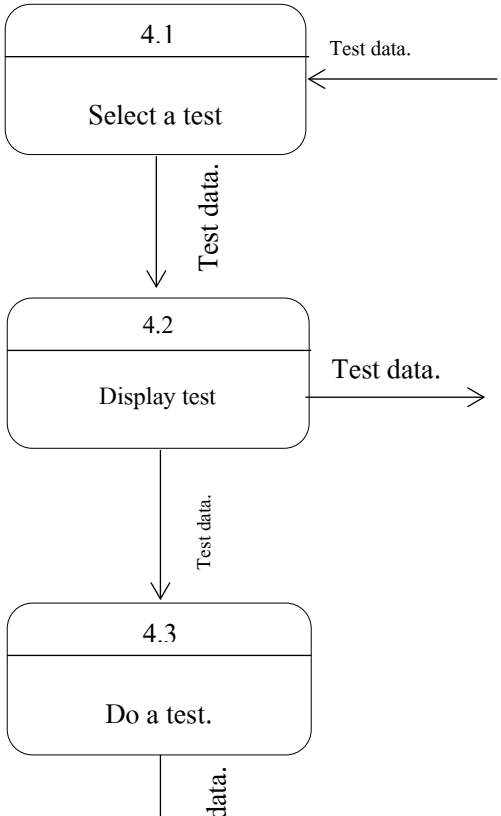


Fig. 3.9 Data Flow Diagram Level 2 Process

Data Base Tables for the system

1. The table shows the database administrator. (Admin)

No.	Attribute Name	Attribute Description	Type	Size	Key	Reference Taber
1	ID_Admin	The code administrator.	Text	5	PK	
2	ID_Point	Code points.	Text	5	FK	
3	Name	Name-surname	Text	50		
4	E-mail	Email	Text	30		
5	User	The name used to login	Text	20		
6	Password	Code login	Text	20		

Table 3.10 Administrator's database table (Admin)

2. The table shows the database of scores

No.	Attribute Name	Attribute Description	Type	Size	Key	Reference Taber
1	ID_Point	Code points.	Text	5	PK	
2	ID_User	Member ID	Text	5	FK	User
3	Name	Name-surname	Text	50		
4	Lesson	Lesson	Varchar	-		
5	Test	Test	Varchar	-		
6	score	score	Number	-		

Table 3.11 Shows the database table of points

3. The table shows the database of members (User)

No.	Attribute Name	Attribute Description	Type	Size	Key	Reference Taber
1	ID_User	Member ID	Text	5	PK	User
2	Name	Name-surname	Text	50		
3	E-mail	Email	Text	30		
5	Username	Logon name	Text	20		

Table 3.12 Shows the database table of members (User)

3.3 Entity Relationship Diagram

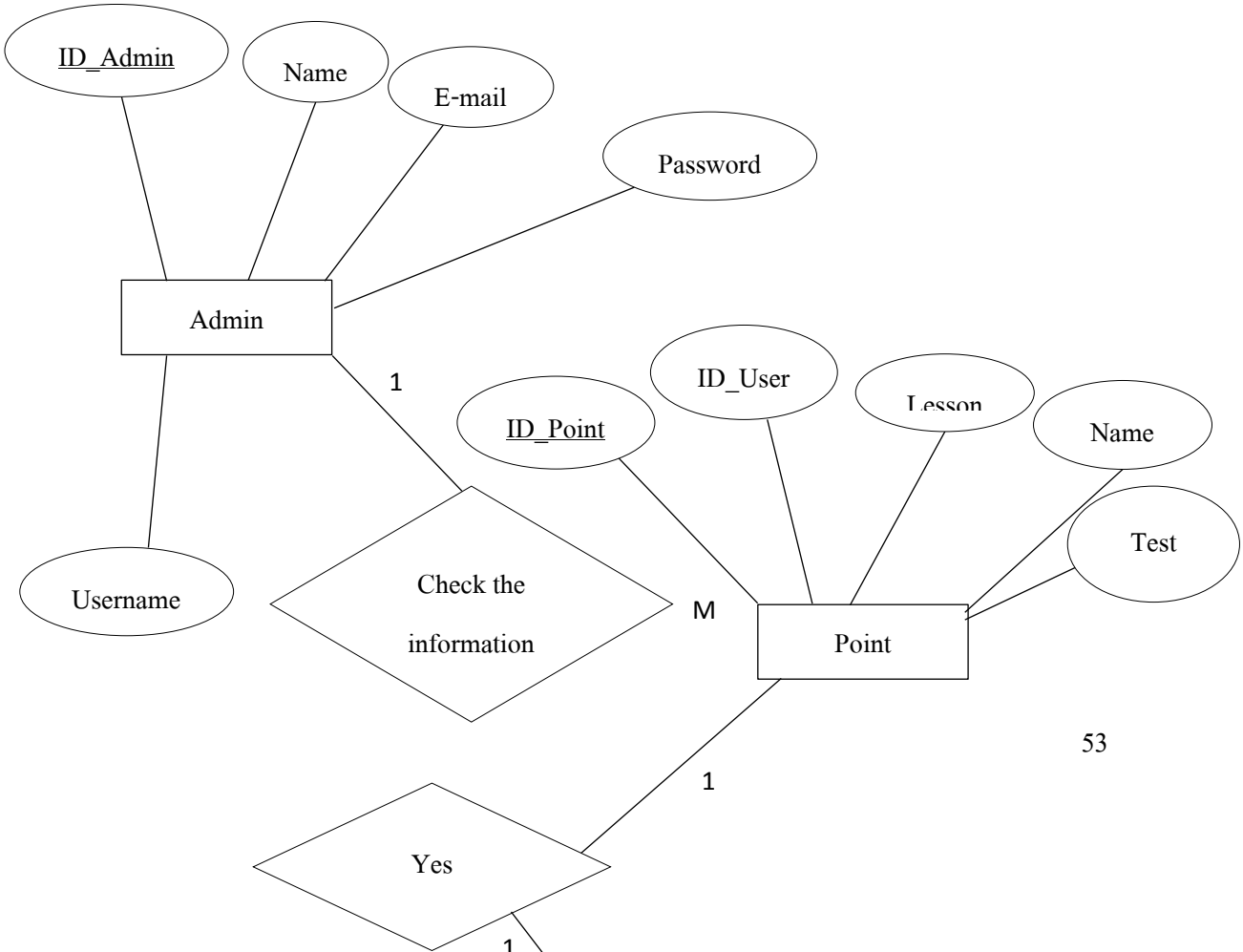


Fig. 3.13 E-R Diagram

3.4 site map

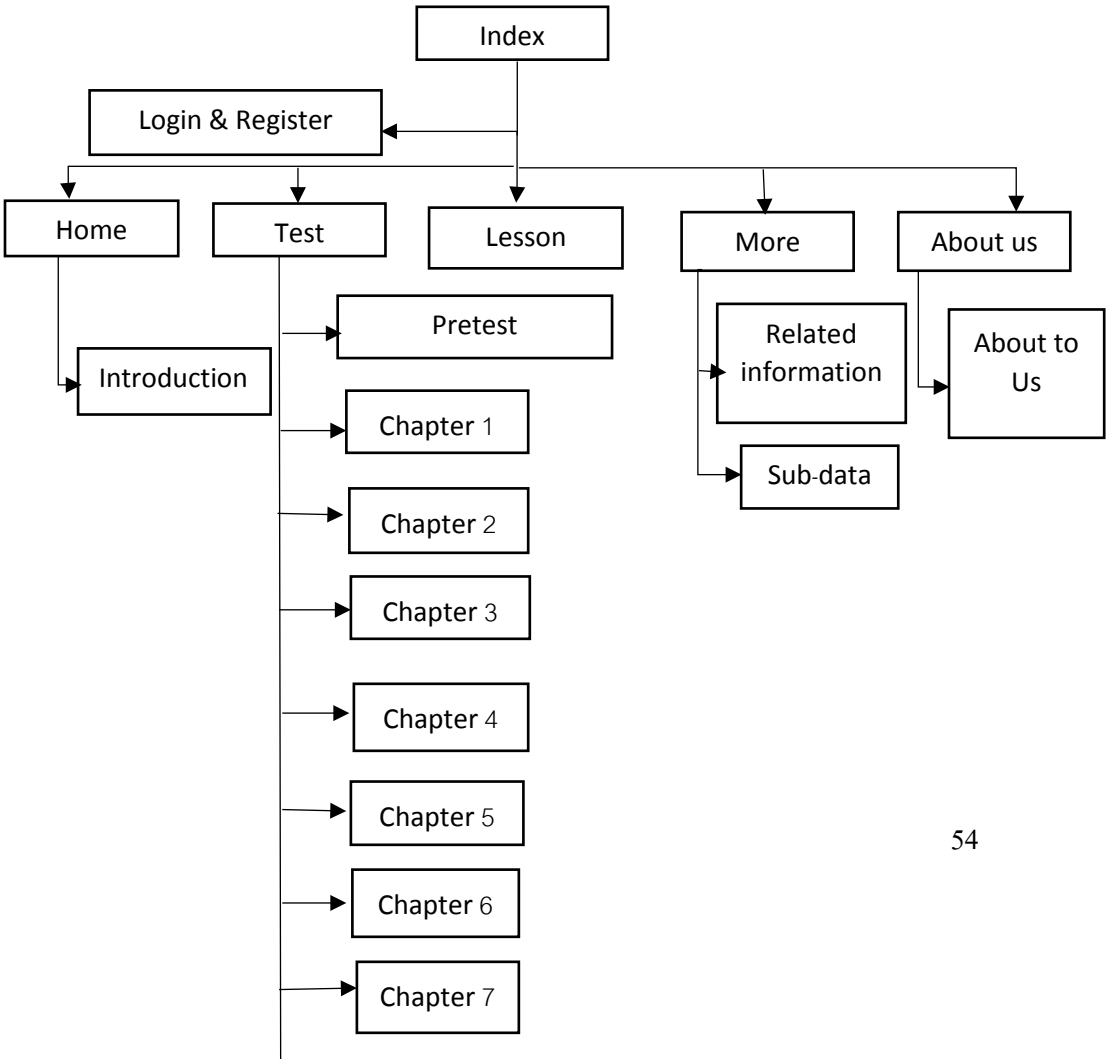


Fig. 3.14 site map

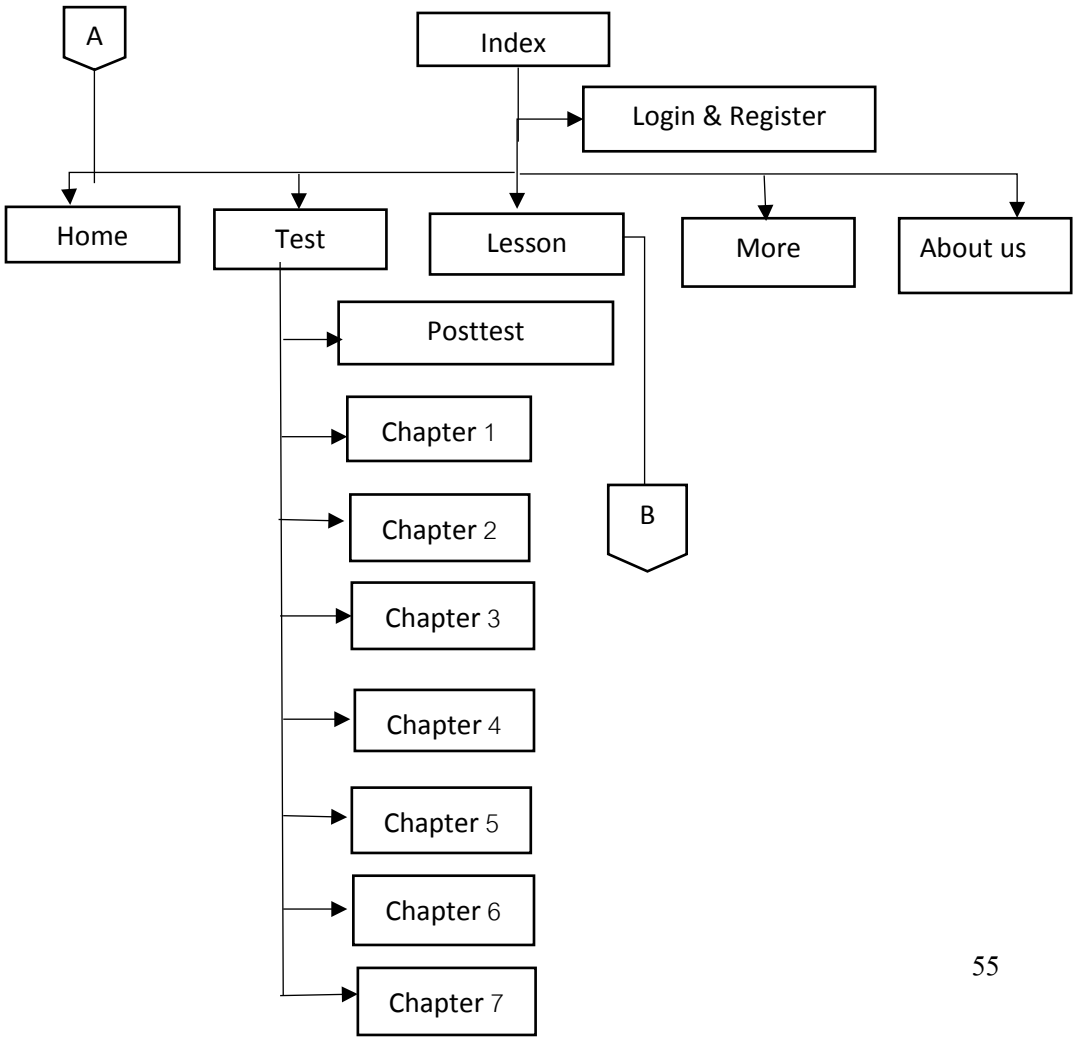


Fig. 3.15 Site Map (Continue)

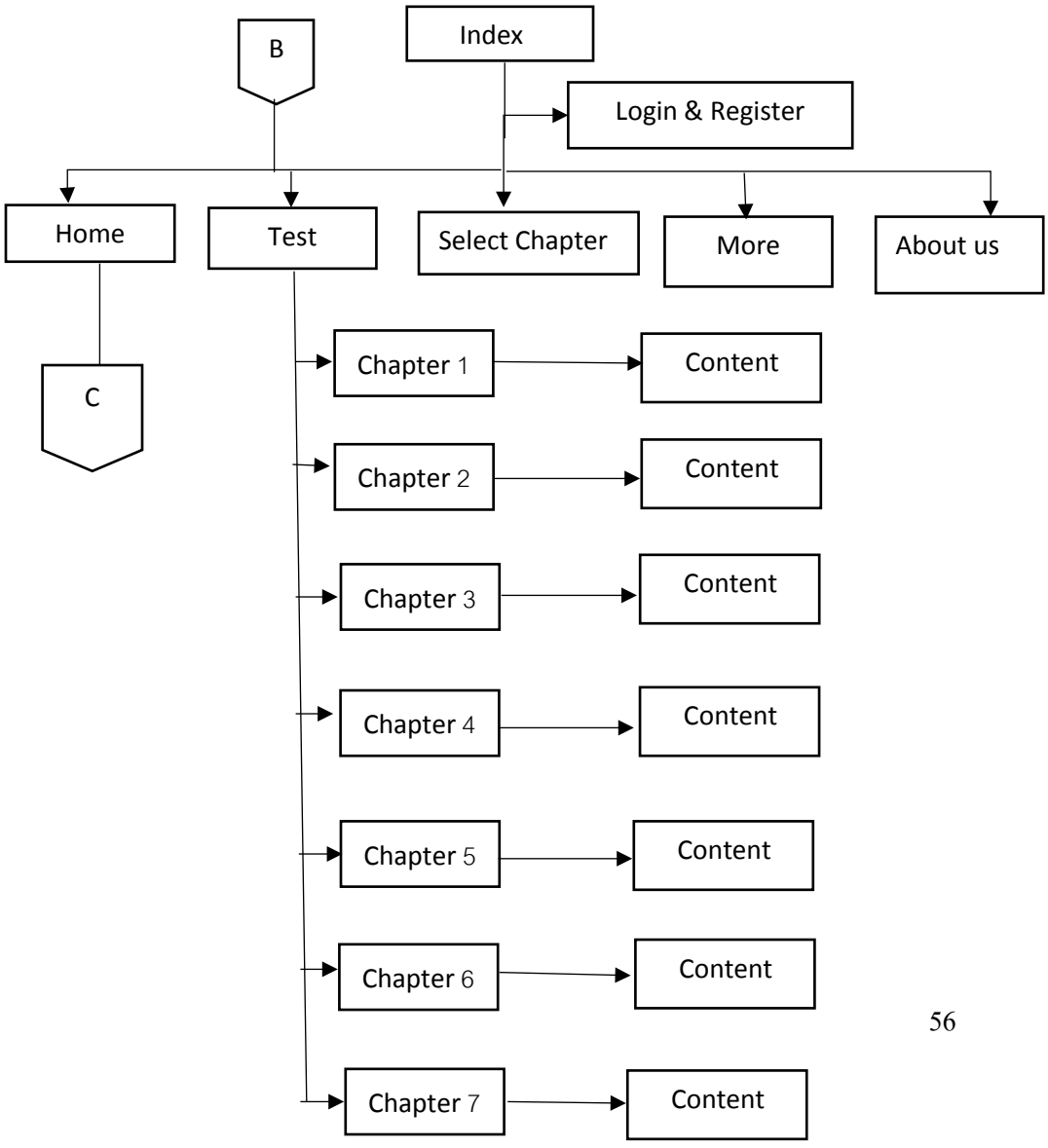


Fig. 3.16 Site Map (Continue)

3.5 Story Board

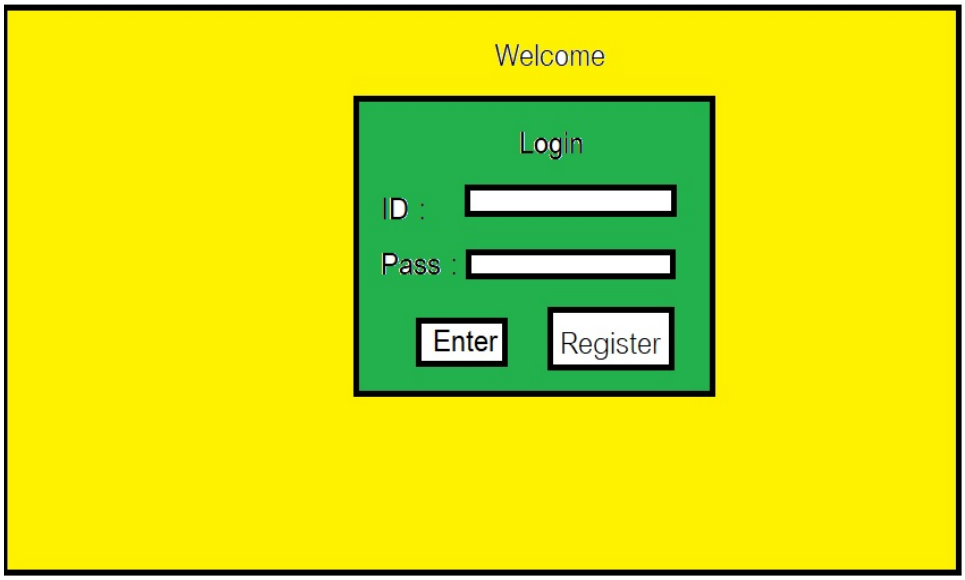


Fig. 3.17 index (Login)

Fig. 3.18 Logo

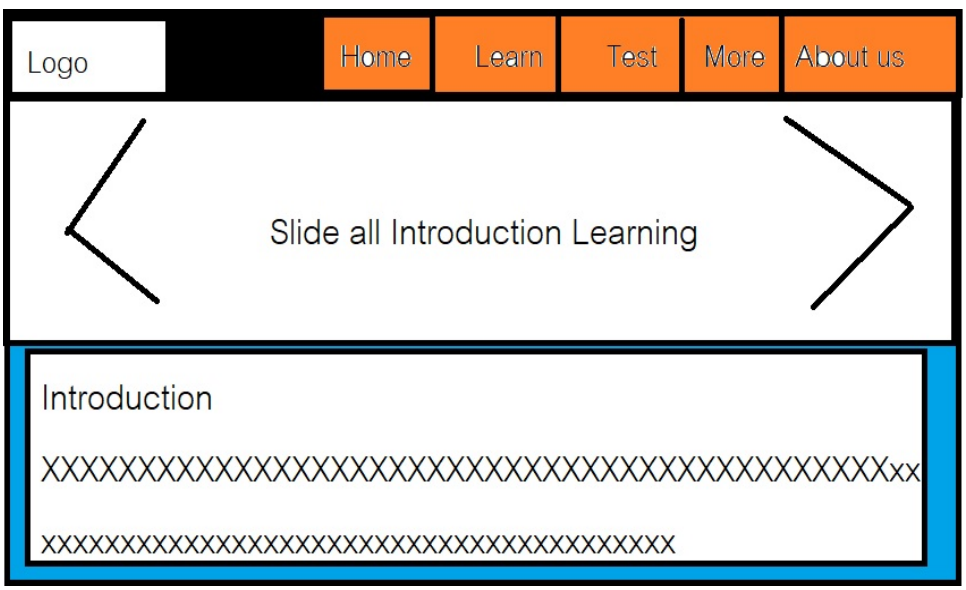


Fig. 3.19 story board Introduction Page

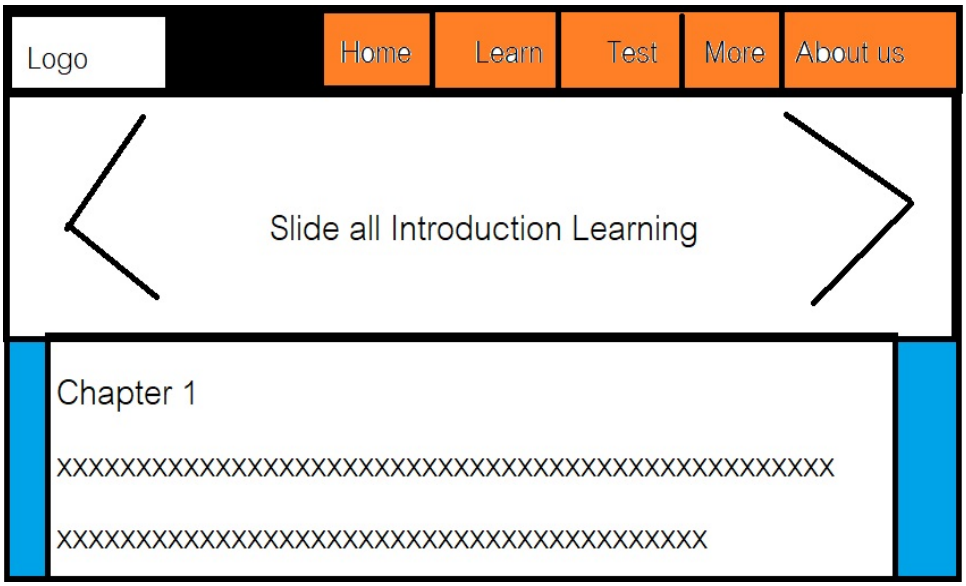


Fig. 3.20 story board Chapter 1

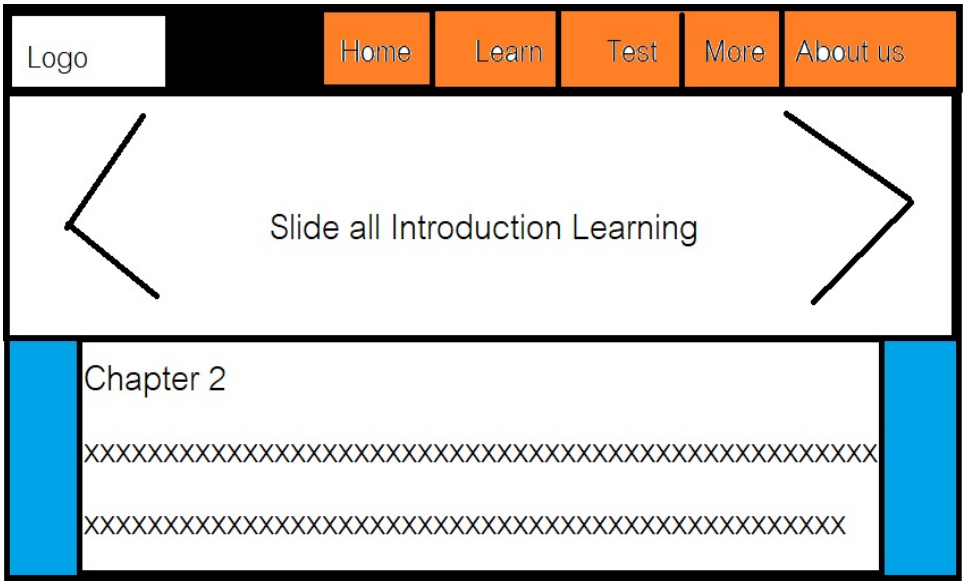


Fig. 3.21 story board Chapter 2

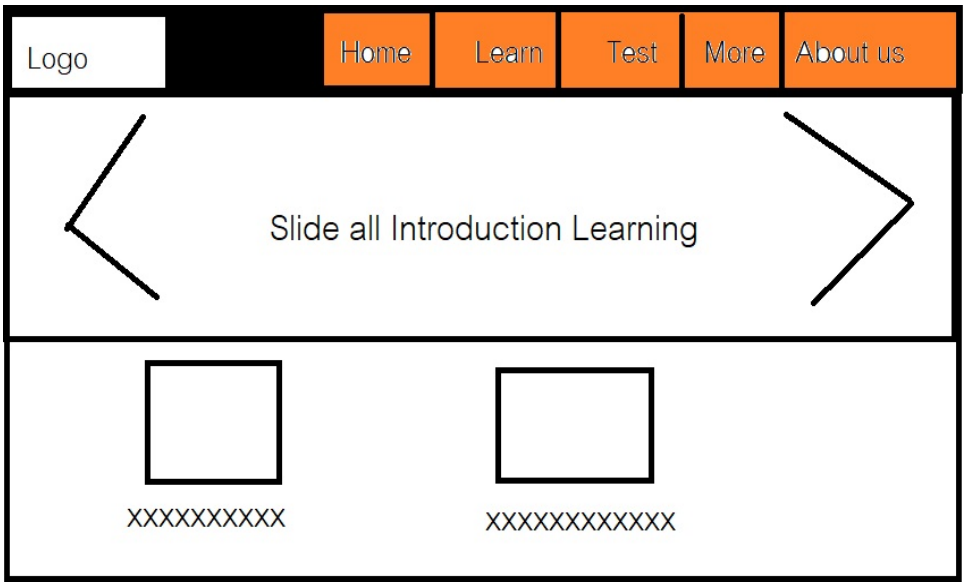


Fig. 3.22 Story Board Chapter 3

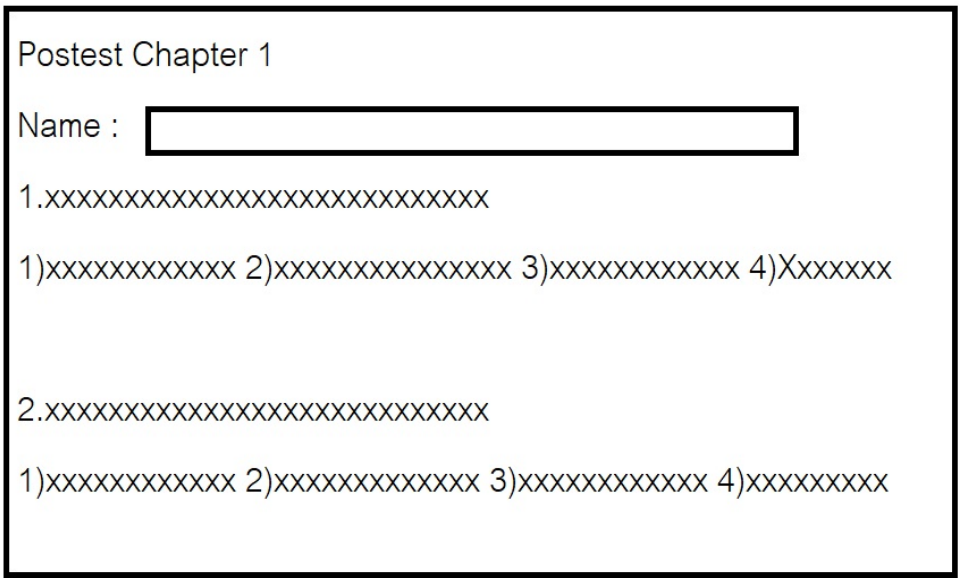


Fig. 3.23 story board Pretest Page

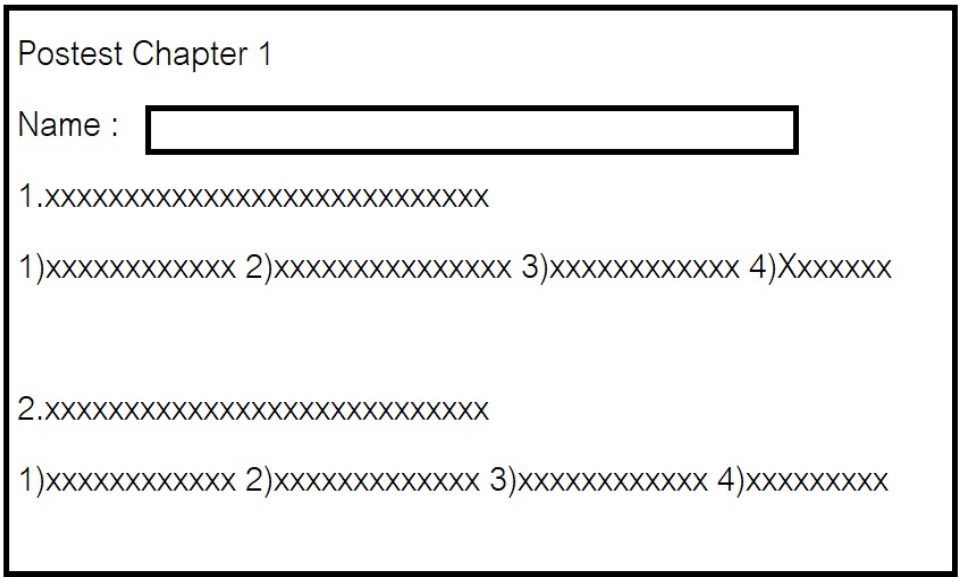


Fig. 3.24 story board Posttest Page

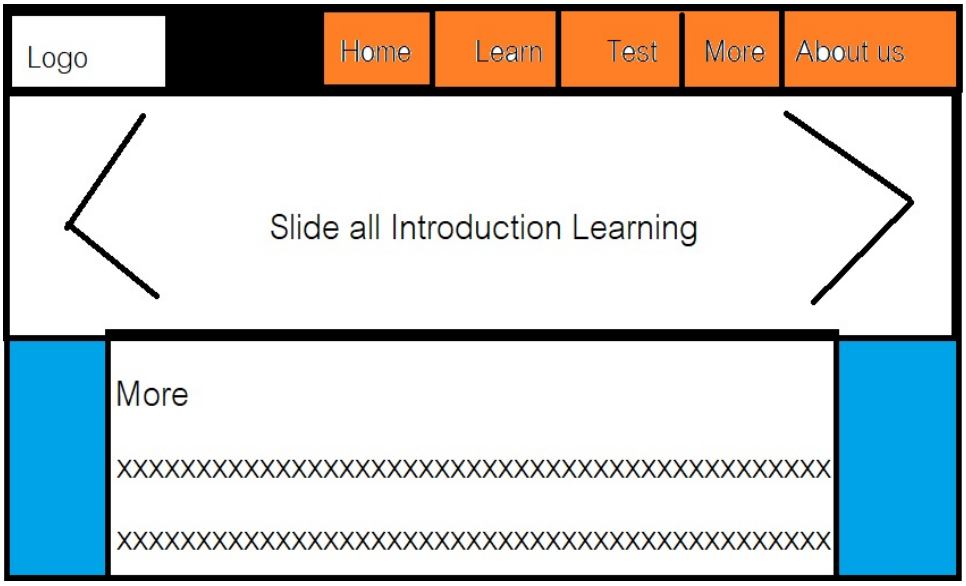


Fig. 3.25 Story Board for more lessons

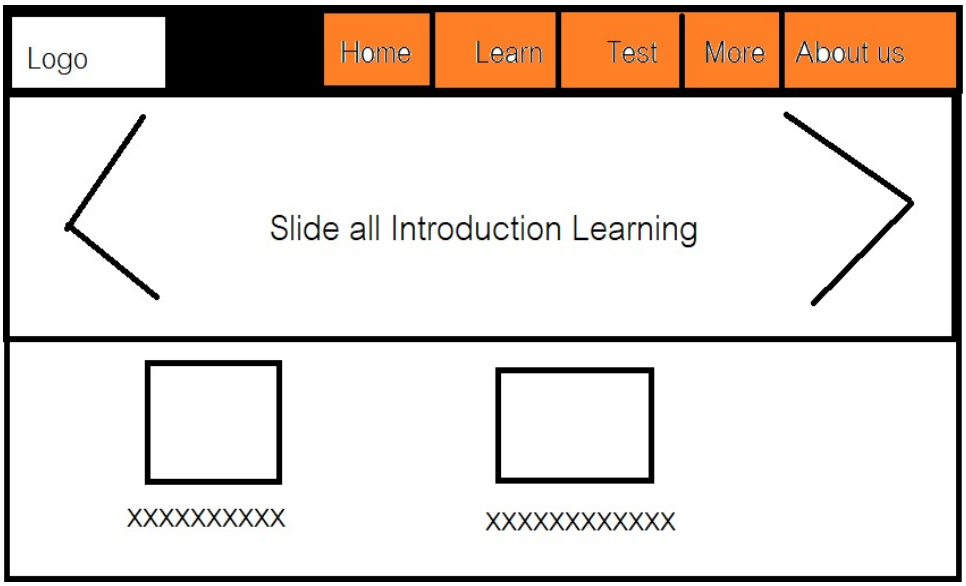


Fig. 3.26 story board for web developers Page

3.6 Input Design

1.Input Data

1.1 Index

1.2 Register

- Register

- login

1.3 Home

1.3.1 Introduction

1.3.2 Lesson Summary 1-7

1.4 Select a chapter 1-7

1.5 Select a Test

1.5.1 Pretest 1-7

1.5.2 Posttest 1-7

1.6 More knowledge

1.6.1 Related information

1.7 Provider

3.7 Output Design

1. Projector is a presentation for the project exam.

2. The computer screen is the form of the website.

3. The printer can print documents.

Chapter 4

The development of educational media system on the website

Computer Assembly and Software Installation

4.1 Tools and equipment used

1. Computer Notebook
2. Printer
3. Photocopier
4. Monitor
5. USB Flash Drive
6. Desktop Computer

4.2 All programs used for development

1. The Programs Adobe Dreamweaver CC used for creating websites
2. The Programs Adobe Photoshop CC is used to edit images.
3. The Programs Appserv 2.5.10 is used to connect to the database.
4. The Programs Microsoft Office Word 365 is used to create documents.
5. The Programs Microsoft Office PowerPoint 365 is used to make presentations.

4.3 How to install the program

Dreamweaver CS6

1. Open the Adobe Dreamweaver CS6 folder.

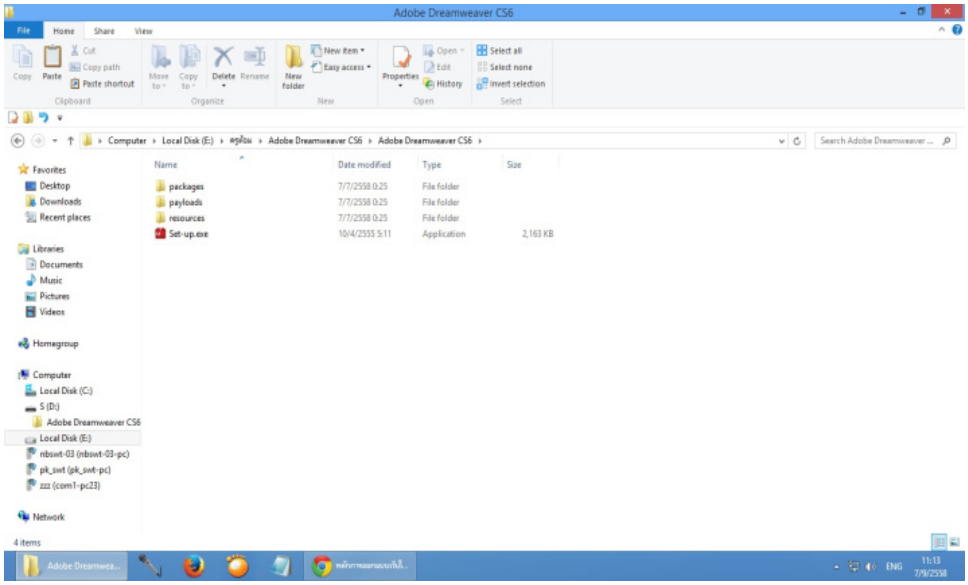


Fig. 4.1 Folder of Dreamweaver

2. Double click the Set-up.exe file and the program will notify you to restart. We choose Ignore to proceed as in the picture.

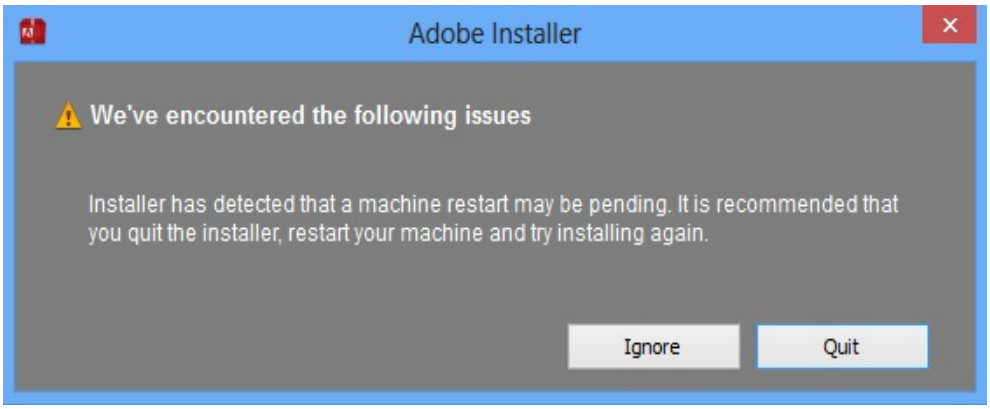


Fig. 4.2 Adobe installer

3. The program will check before installing the program.

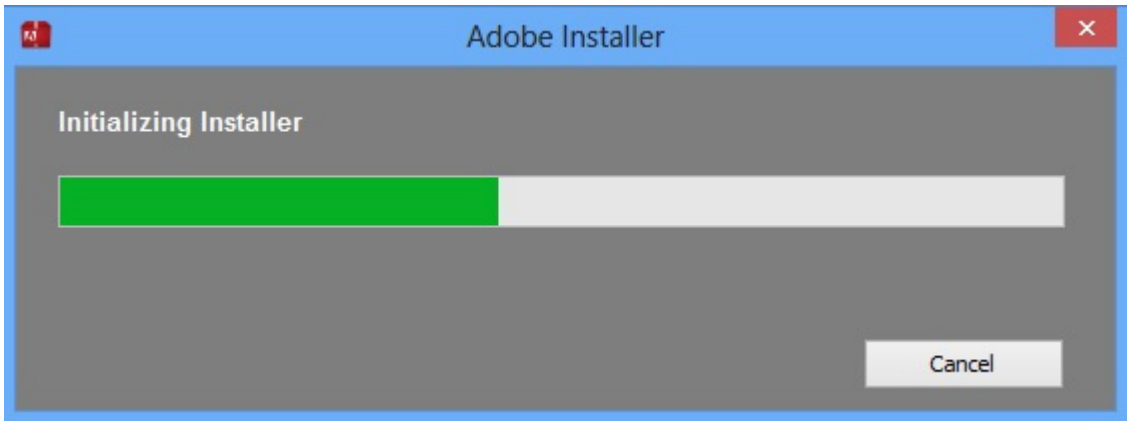


Fig. 4.3 Waiting

4. When the program has finished checking Will be taken to the screen to install the program for us, click Accept

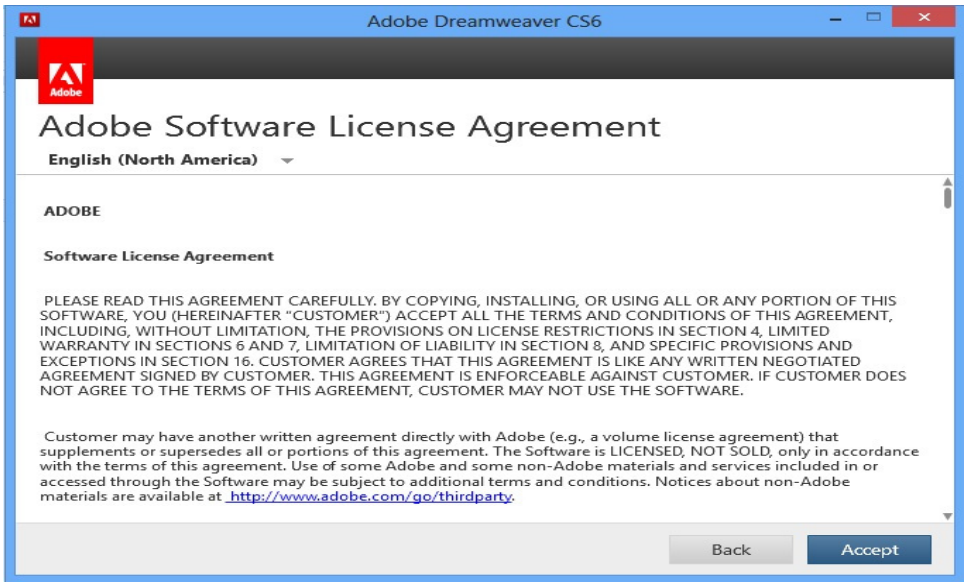


Fig. 4.4 License Agreement

4. Enter the Serial Number and click the Next button.

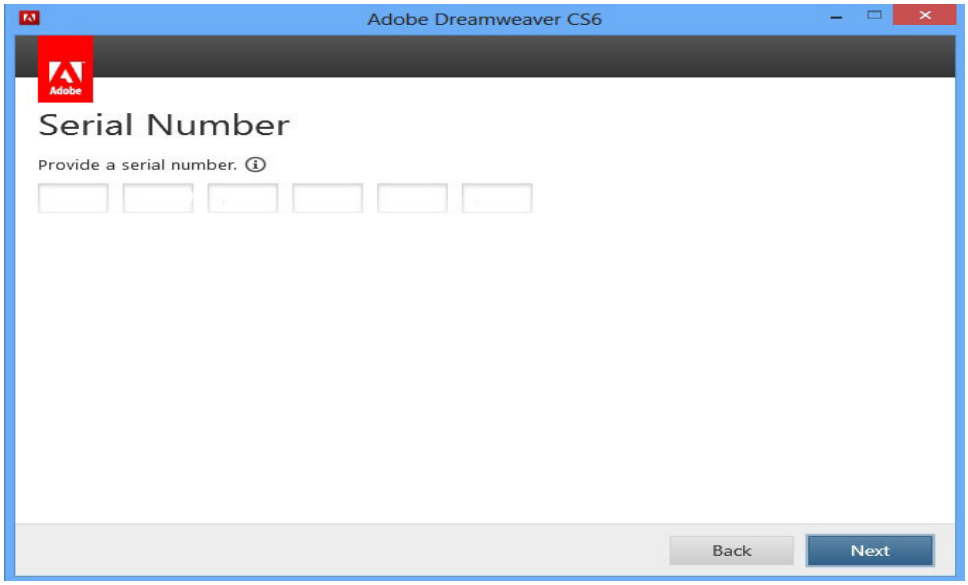


Fig. 4.5 Serial Number

5. Will enter the program options page, select Installs

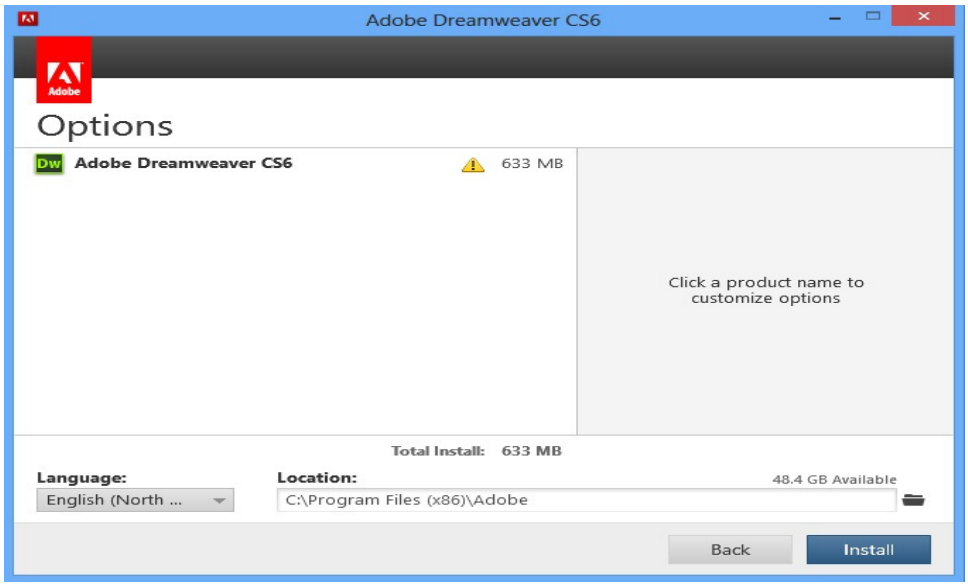


Fig. 4.6 Select Options

7. Wait for the program to finish installing.

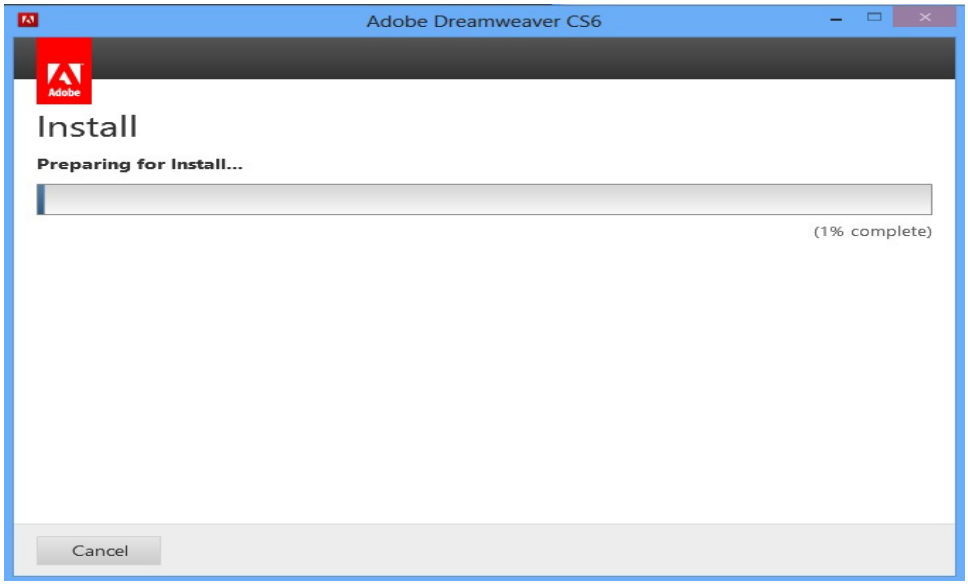


Fig. 4.7 Preparing for install

8. When the installation is complete, the screen will appear. As we click click Close.

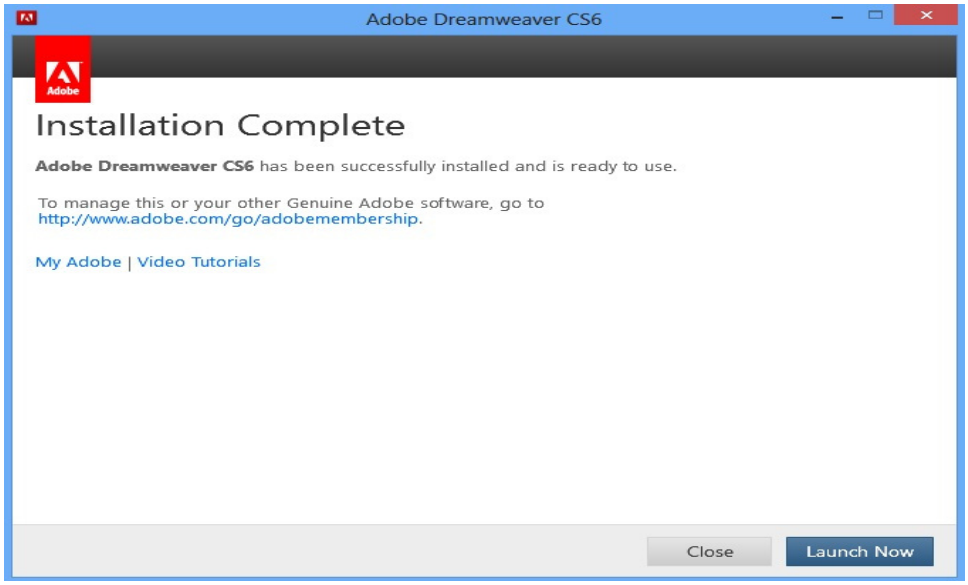


Fig. 4.8 installation Complete

The process of opening Adobe Dreamweaver CS6.

1. For Windows7, open Dreamweaver by going to the Start menu> All Programs> Adobe Dreamweaver CS6.

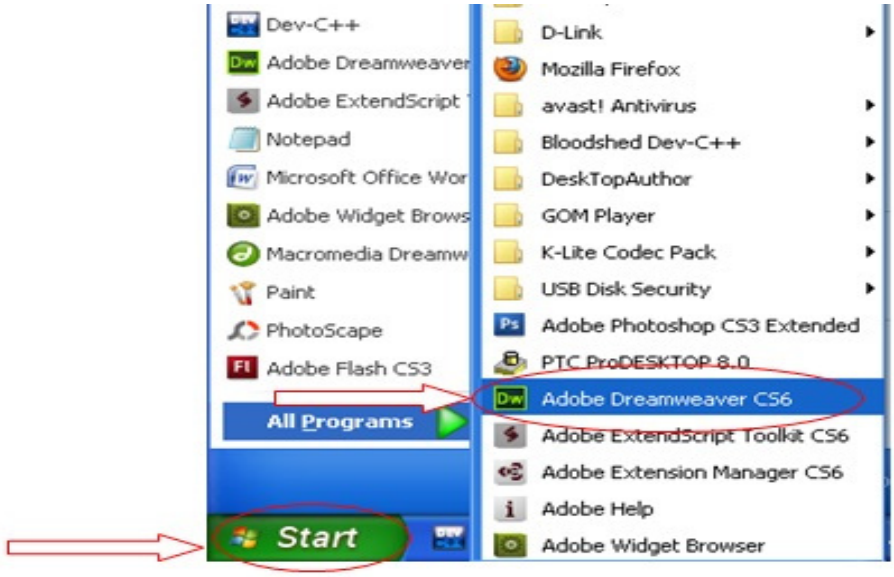


Fig. 4.9 How to enter the Dreamweaver

2. For Windows8, open Dreamweaver by going to Start Menu> Apps> Adobe Dreamweaver CS6.

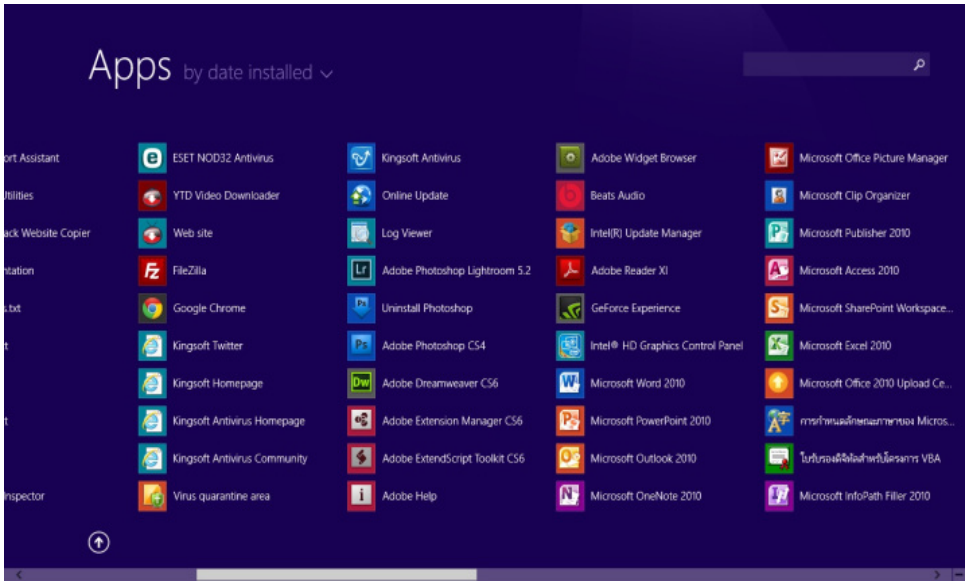


Fig. 4.10 For Windows 8

3. When opening the program for the first time You'll see the screen as shown. Click Select All >> OK.

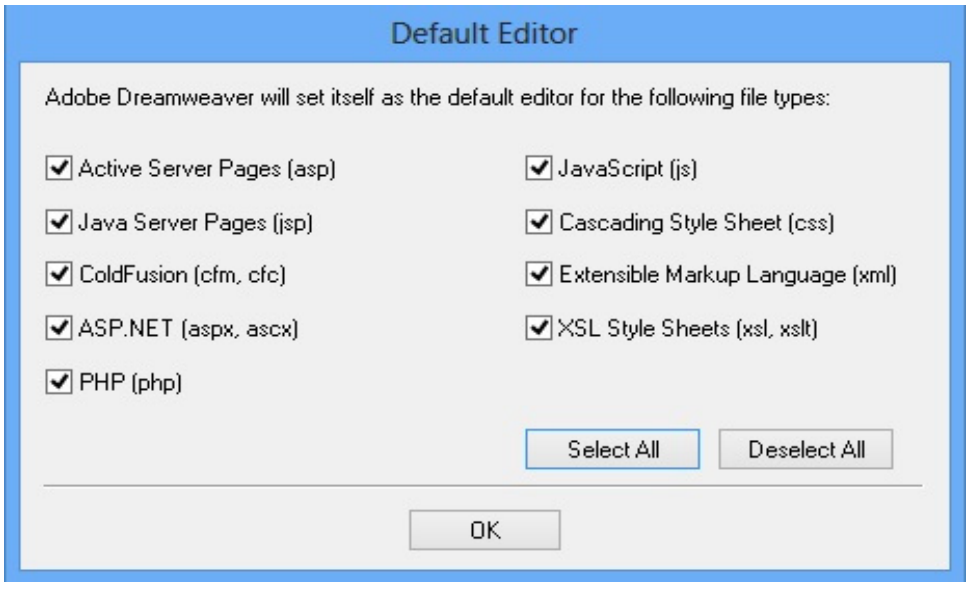


Fig. 4.11 Default Editor

4. And then will enter the Welcome Screen as in the picture

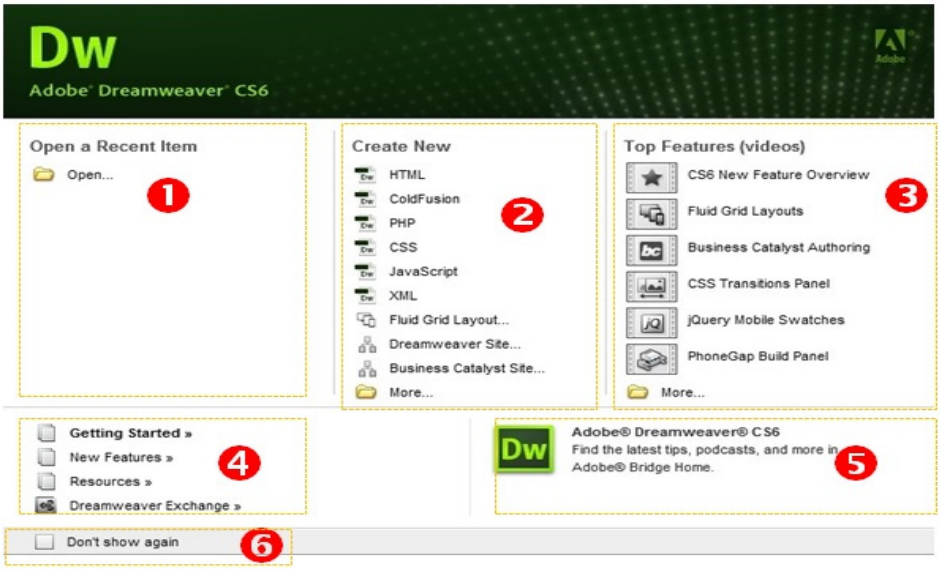


Fig 4.12 Welcome Screen

- Welcome Screen is a tool to help select the initial steps for using the program. The options are divided into groups as shown.
- **Number 1** Open a Recent Item Open the file used to use by clicking on the list of names those are displayed (In order from most recently opened or click Open to open other files)
- **Number 2** Create New, Create a new file and clicking HTML will create a basic webpage, but clicking another topic will create a webpage or file of that type.
- **Number 3** Top Features (videos) are shortcuts for accessing the program's details and techniques through the Adobe website.
- **Number 4**, open the program instructions
- **Number 5**. Download the program or view information on the Adobe website.
- **Number 6** Click this option if you do not want to display the Welcome Screen again next time.

4.4 How to install Appserv.

Prepare the program for installation.

Download the AppServ program from the website http://www.appserv.org. By choosing the version you want to install between versions 2.4.x and 2.5.x

Which the difference of these 2 versions is

2.4.x is the version that brings the package that is stable mainly Suitable for those who want the stability of the system.

By not focusing on using the new functions

2.5.x is the version that brings new packages especially for use Suitable for developers who need new systems.

Or want to test Try out the new functions. Which may not be 100% stable of the system

Because the package from the developer Still in the testing phase Try to find the error.

Steps to install AppServ

1. Double click the file. appserv-win32-x.x.x.exe To complete the installation Will appear on the screen.

Fig. 4.13 Setup Wizard

2. Enter the program terms of use. AppServ is distributed in the GNU License. If the installer Read various conditions finished If accepting the conditions, click Next to proceed with the installation. But if not accepting the conditions Click Cancel to exit the AppServ installation.

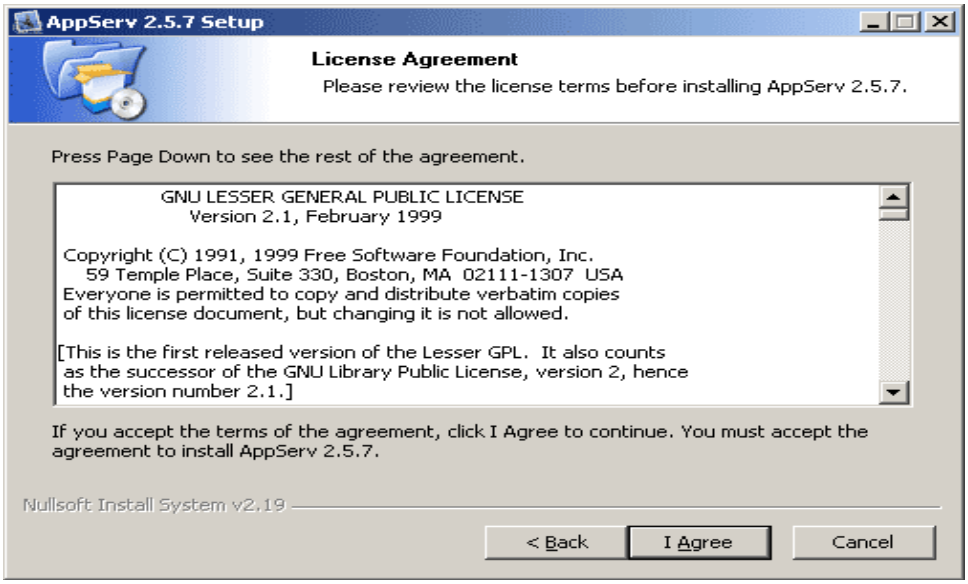


Fig. 4.14 License Agreement

3. Enter the step to select the destination you want to install. By default, the installation destination will be C: AppServ. If you want to change the destination, click Browse and select the desired destination When the destination is selected. Click Next to proceed to the next installation process.

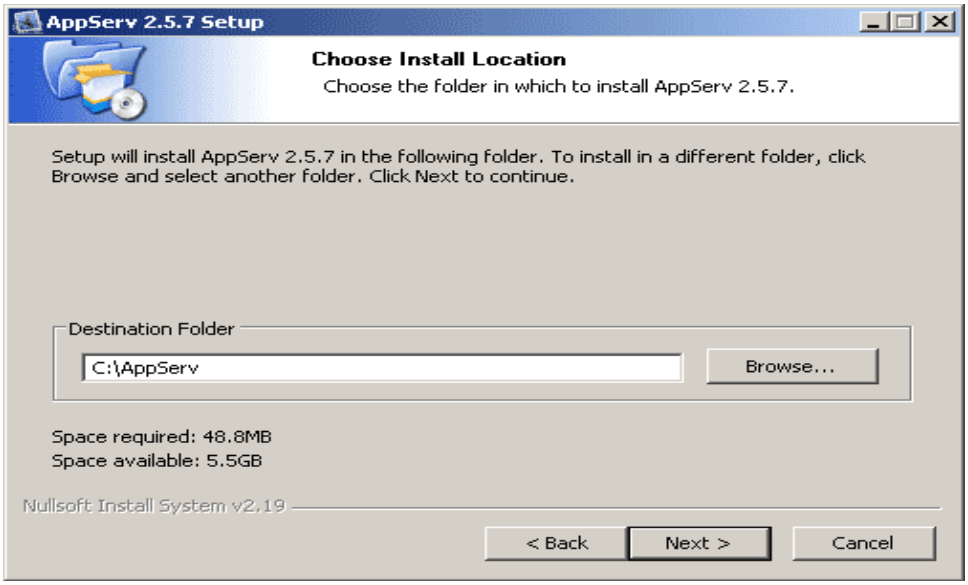


Fig. 4.15 Choose install Location

4. Select the Package Components you want to install. By default, will choose to install every package, but if the userWant to select specific packages, can choose according to the desired item. The details of each package are as follows

   - Apache HTTP Server is a program that makes a Web Server.

   - MySQL Database is a program that acts as a Database Server.

- PHP Hypertext Preprocessor is a program that performs the processing of PHP language.

- phpMyAdmin is a program used to manage MySQL databases through websites.

When the package has been selected, click Next to proceed to the installation process.

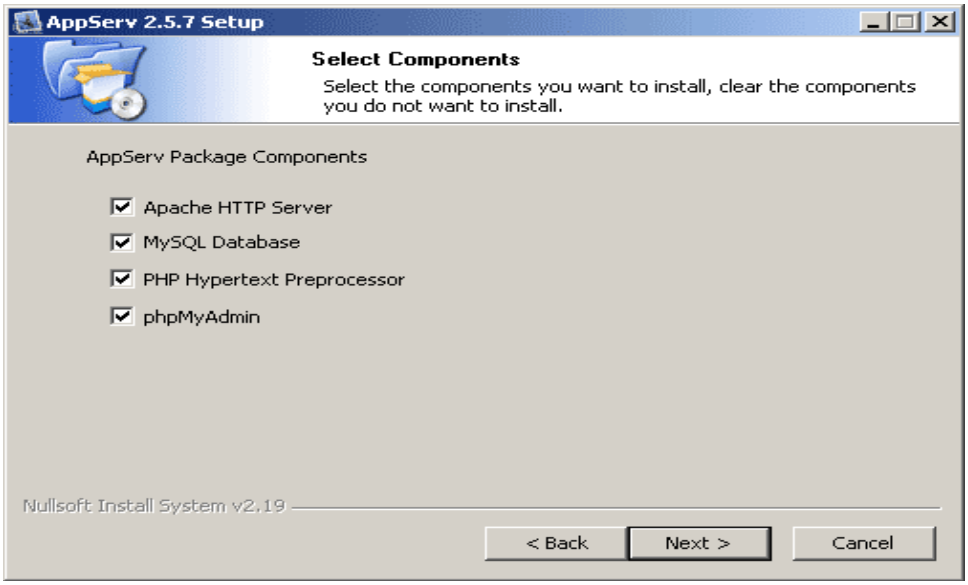


Fig. 4.16 Select Components

5. There are 3 parts of Apache Web Server configuration as shown in figure 5, which are

Server Name is the field for entering your Web Server name such as www.appserv.org.

Admin Email is a box for entering information. Admin email, such as root@appserv.org

HTTP Port is a port for specifying the port to use for Apache Web Server. Generally, Protocol HTTP Will have a base value of 80. If you want to avoid using Port 80, you can edit it.

If there is a change in the Port for accessing the Web Server every time you use the website

It is also necessary to specify the Port number. For example, if you choose to use Port 99 for every website use, you must use http://www.appserv.org:99 In order to be able to access

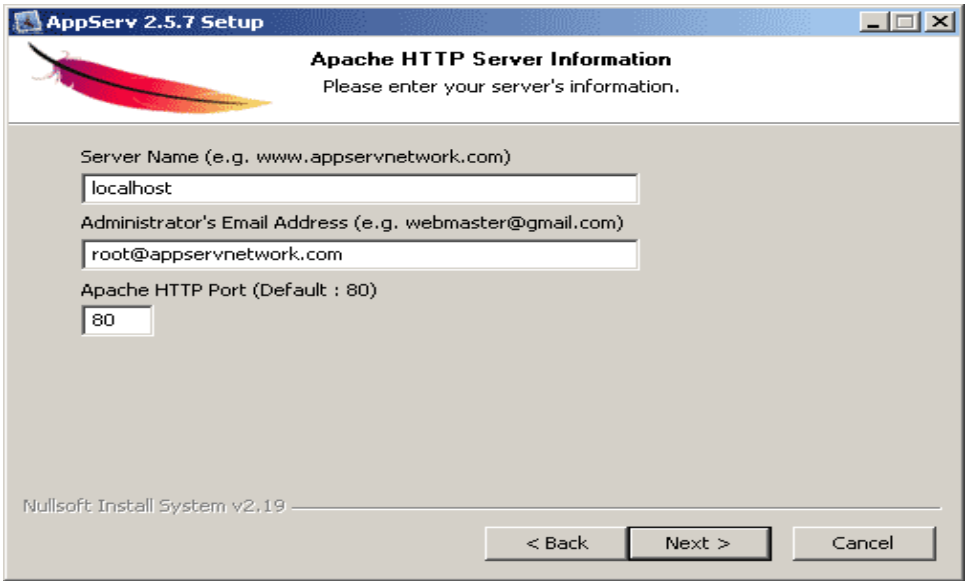


Fig. 4.17 enter your Server's Information

6. Configure the strength of the MySQL database. There are all 3 parts as in Figure 6:

Root password The root password used by the root or system administrator. Every time the database is used as an administrator, specify the user root.

Character sets used to configure the language system used to store databases, sort databases, import databases, export databases, contact database, old passwords

If you have a problem using the old version of the PHP API

The error was encountered. The client does not support the authentication protocol requested by the server. consider upgrading MySQL client

Choose Old Password to avoid this problem.

Enable MyISAM. If you want to use the database in the MyISAM format, select this section as well.

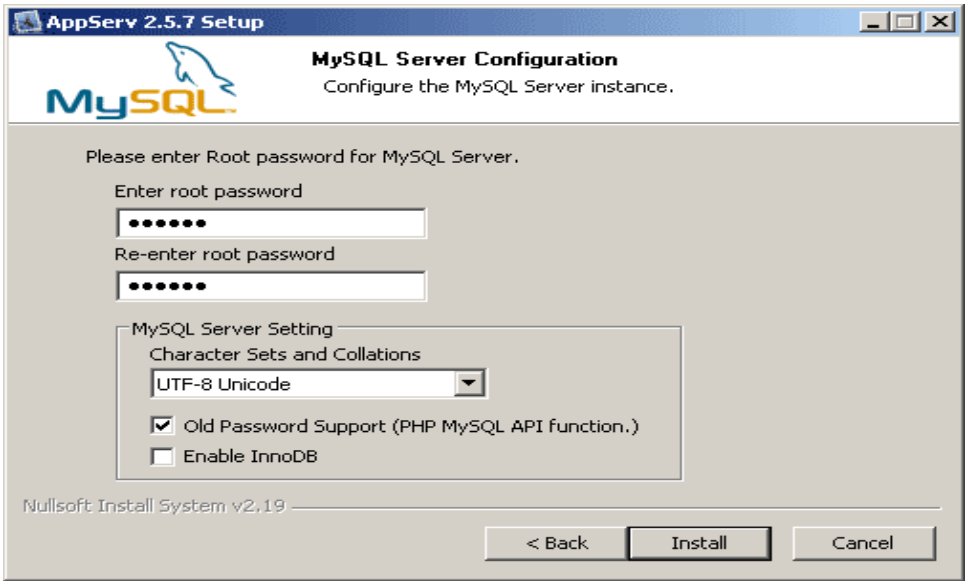


Fig. 4.18 Enter Password

7. End the AppServ installation process. For this last step, there will be a choice whether to instruct Apache and MySQL to run.

Immediately or not, then press the Finish button to finish installing the AppServ program.

Fig. 4.19 Complete installation

4.5 The Step to Use the System

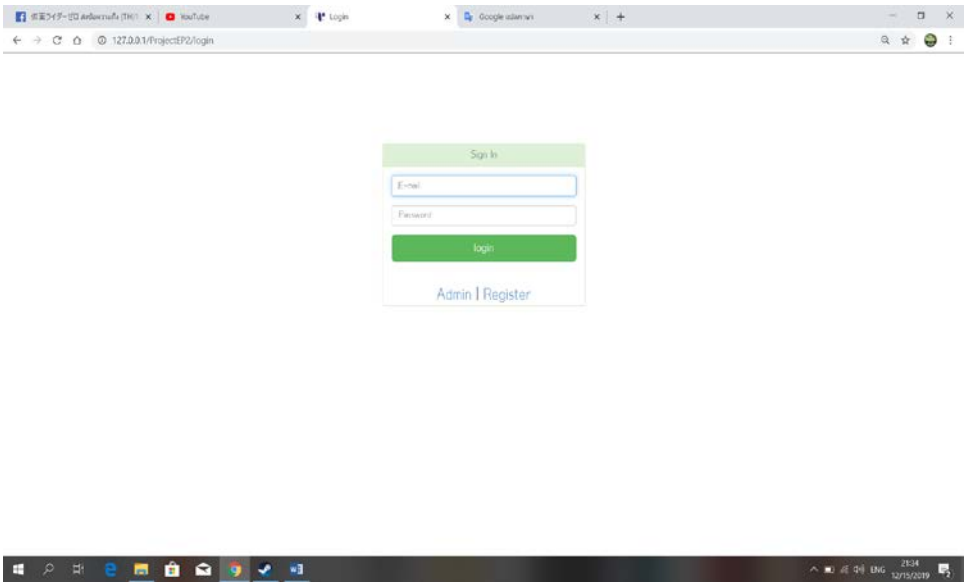


Fig. 4.20 Login Page

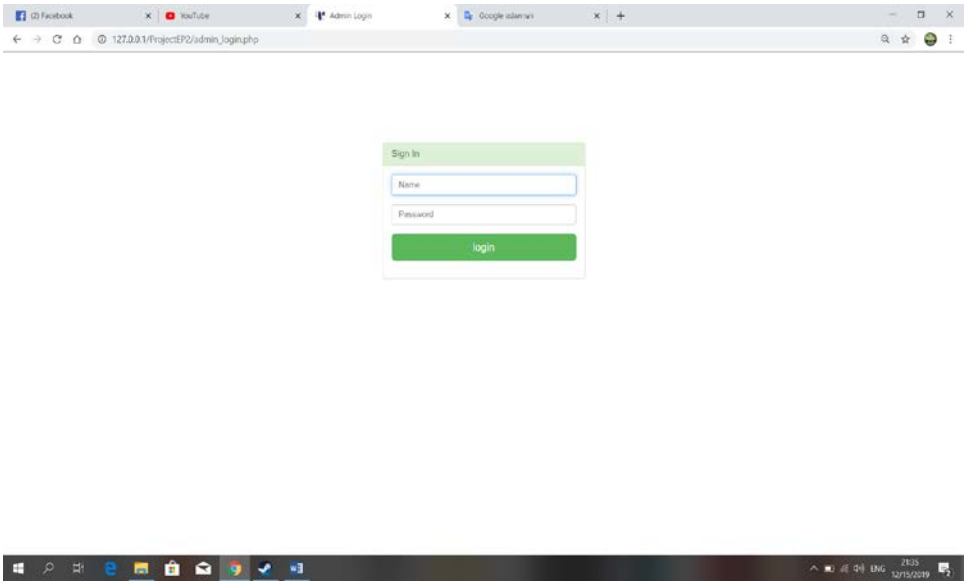


Fig. 4.21 Login Page (For Admin)

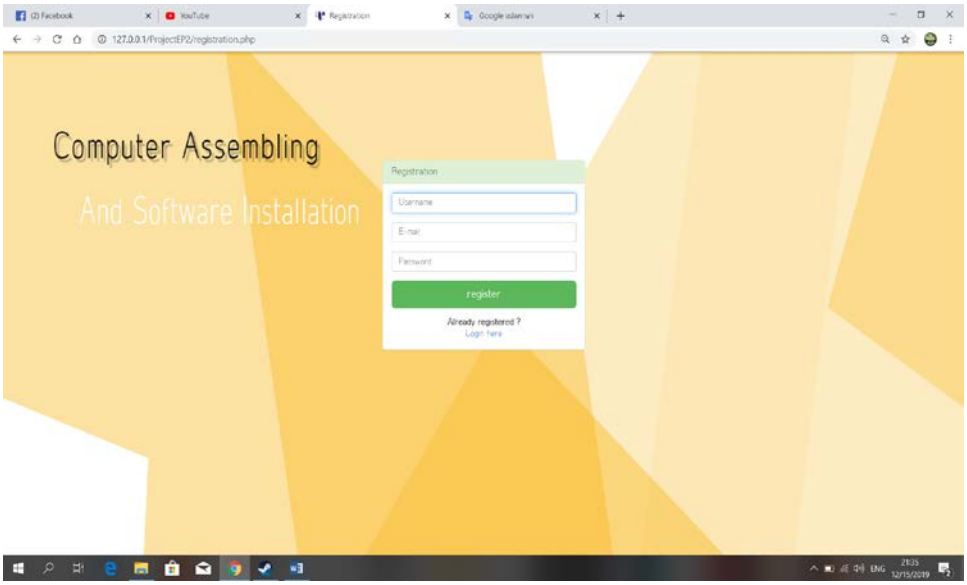


Fig. 4.22 Register Page

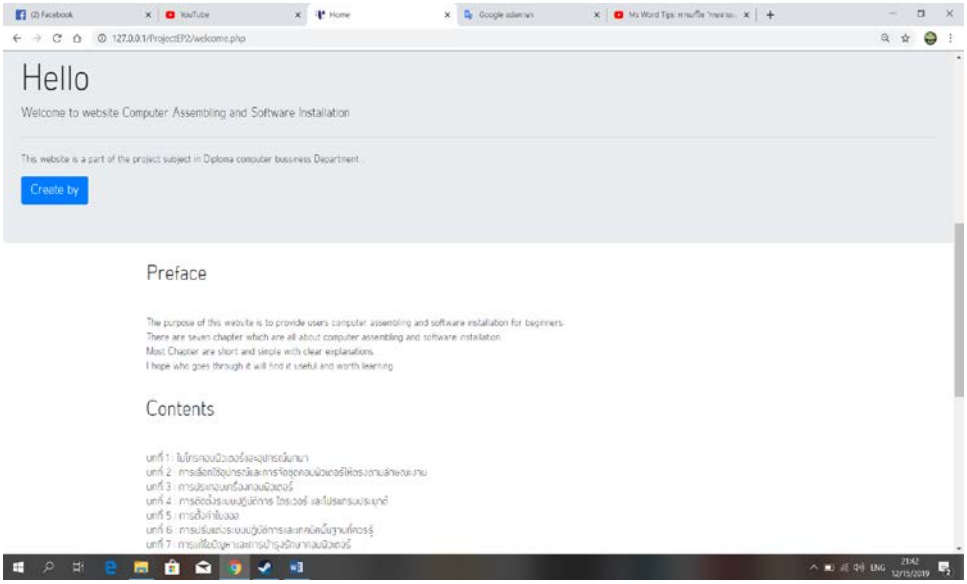


Fig. 4.23 Home Page

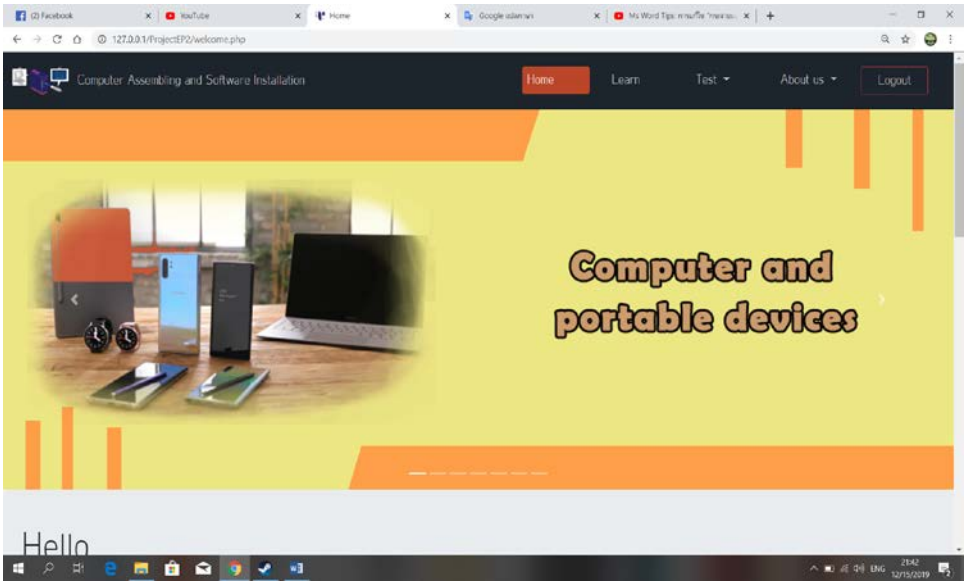


Fig. 4.24 Banner and Button

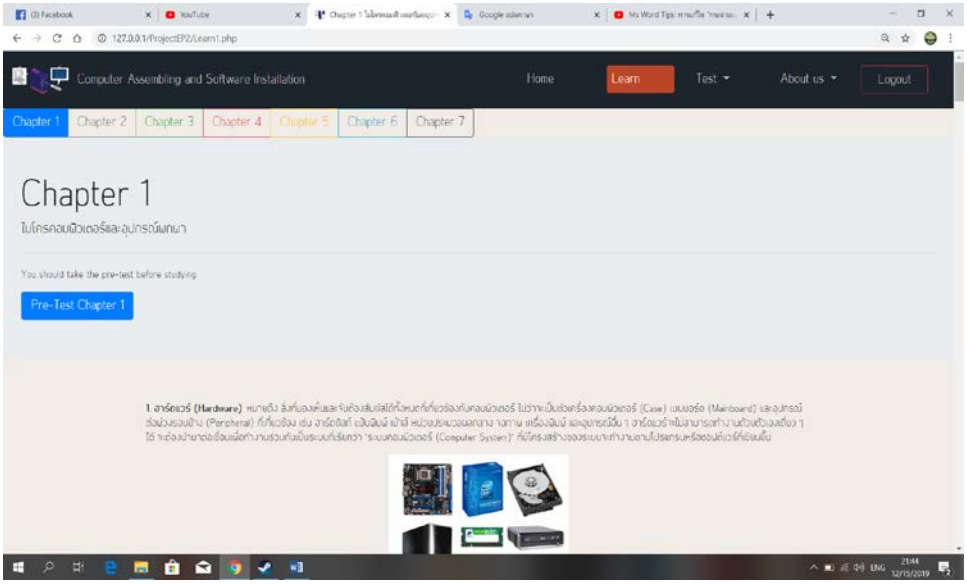


Fig. 4.25 Chapter 1 Lesson

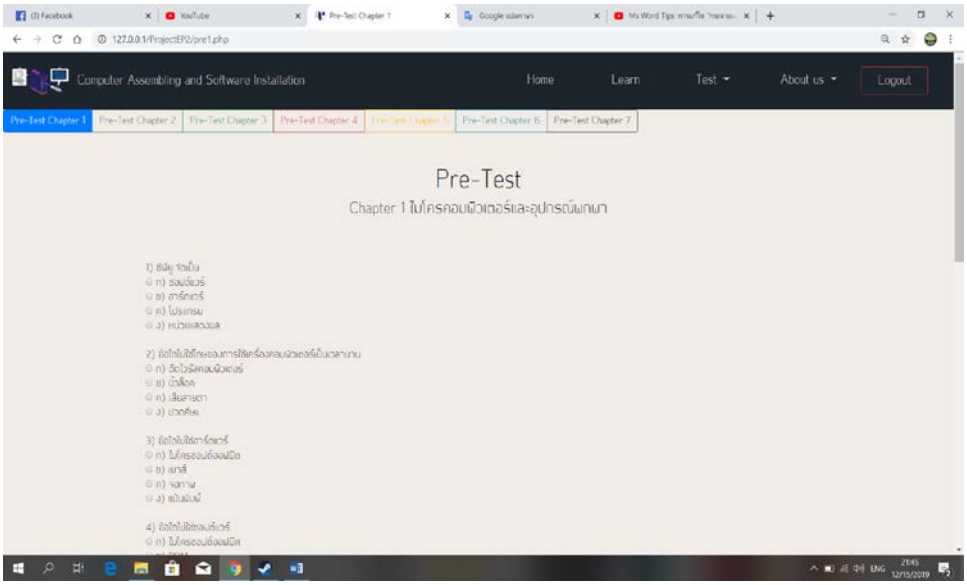


Fig. 4.26 Pre-test of chapter 1 Page

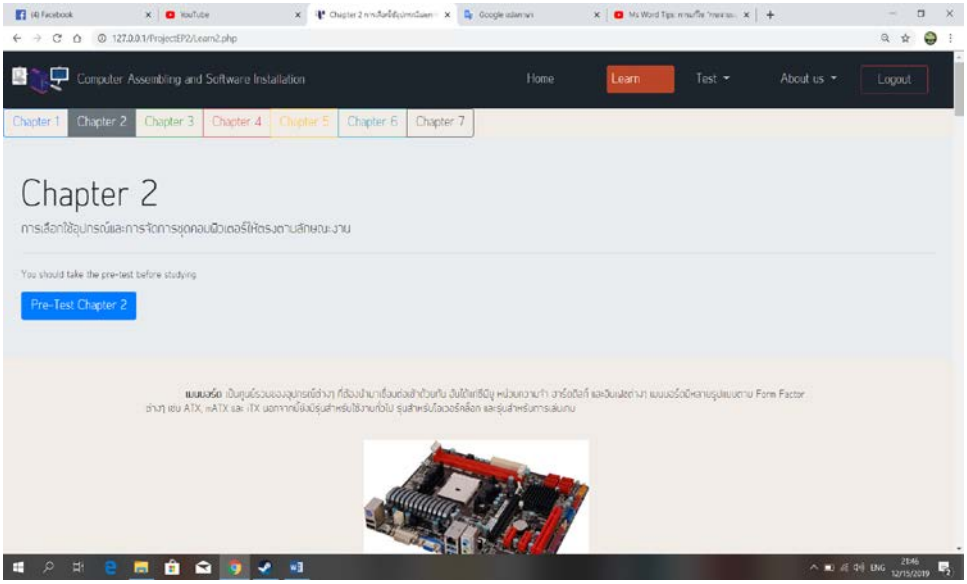


Fig. 4.27 Chapter 2 Page

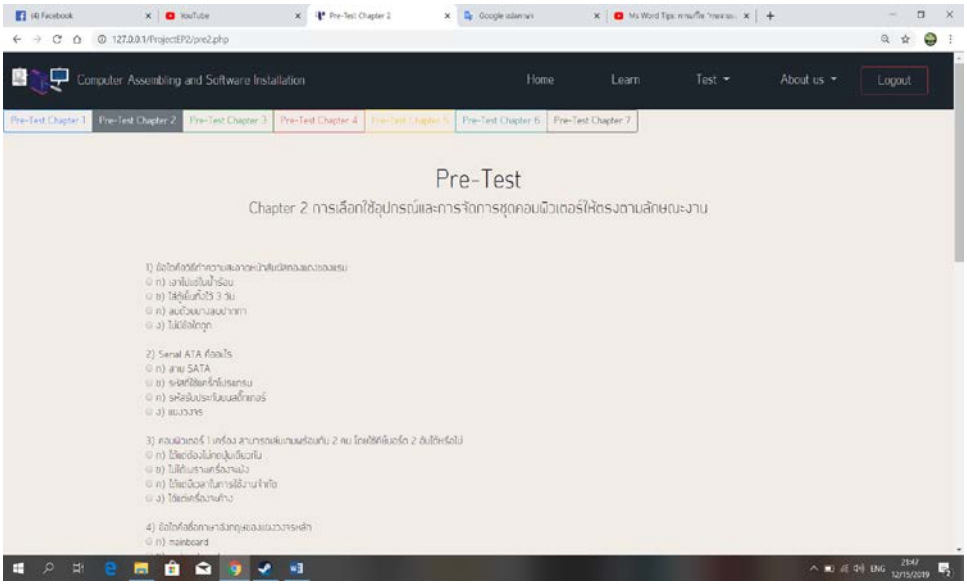


Fig. 4.28 Pre-test of Chapter 2 Page

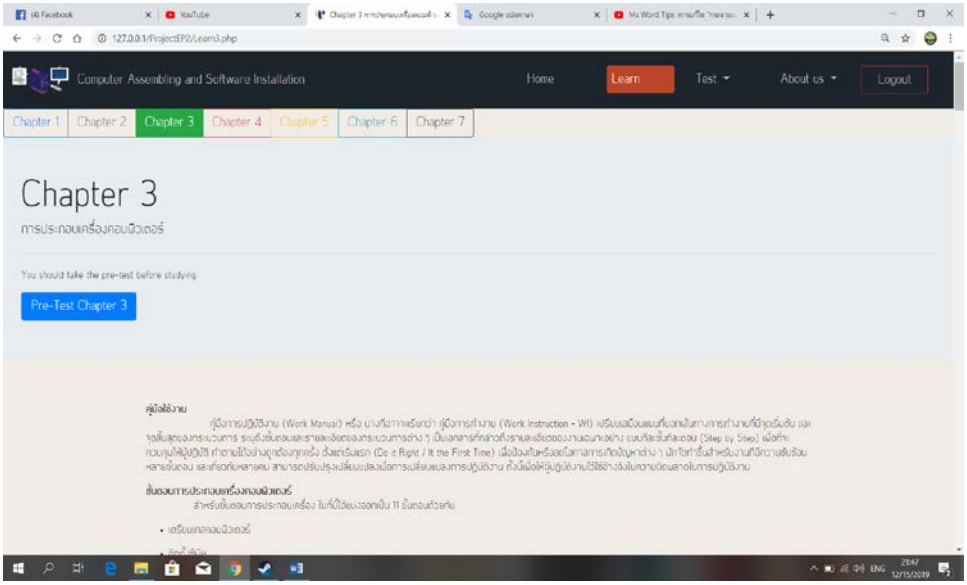


Fig. 4.29 Chapter 3 Page

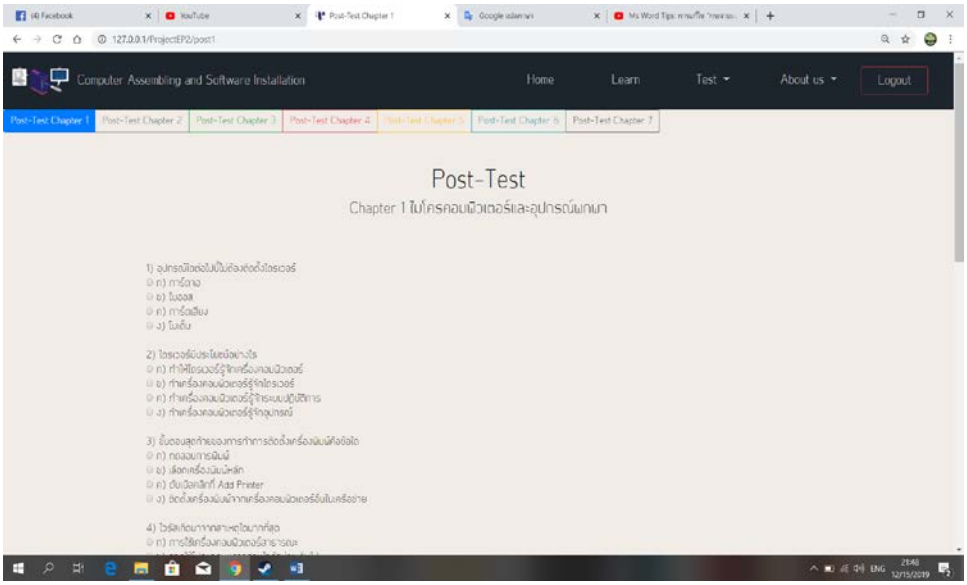


Fig. 4.30 Post-Test of Chapter 1 page

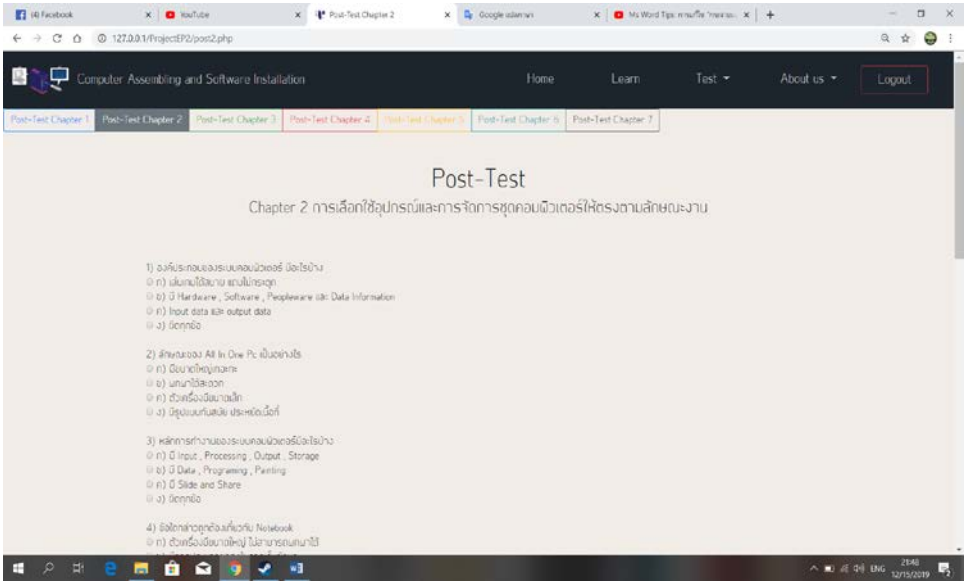


Fig. 4.31 Post-Test of Chapter 2 Page

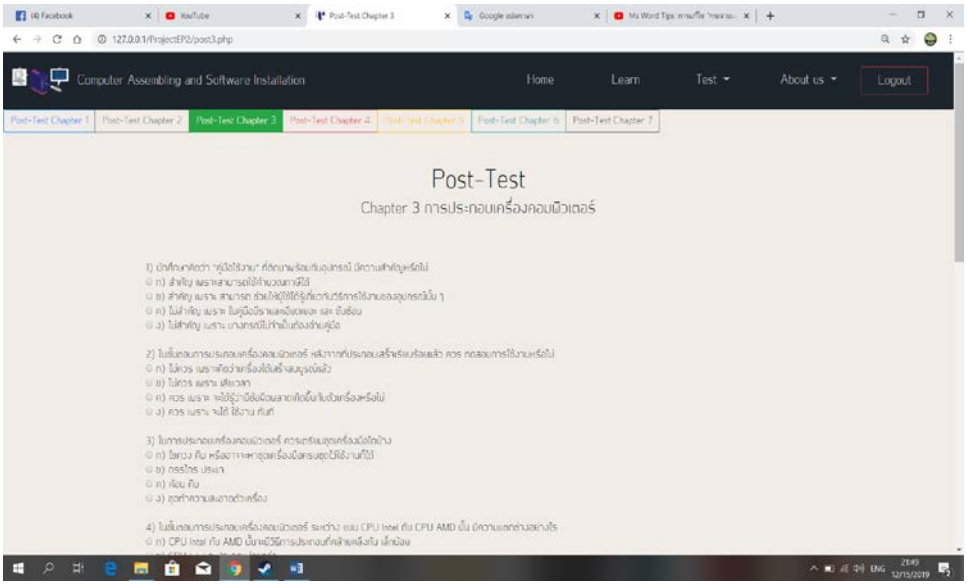


Fig. 4.32 Post-Test of Chapter 3Page

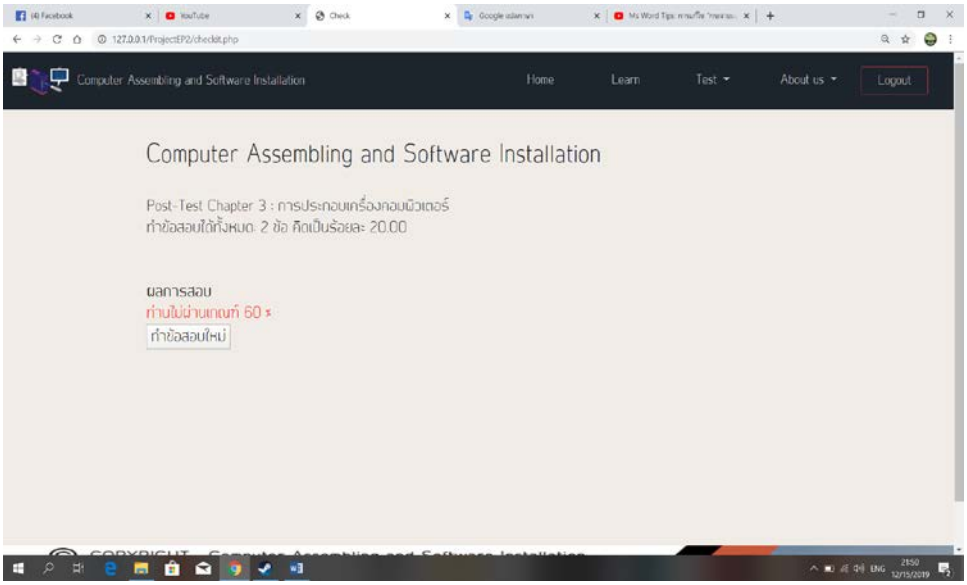


Fig. 4.33 Check Score Page

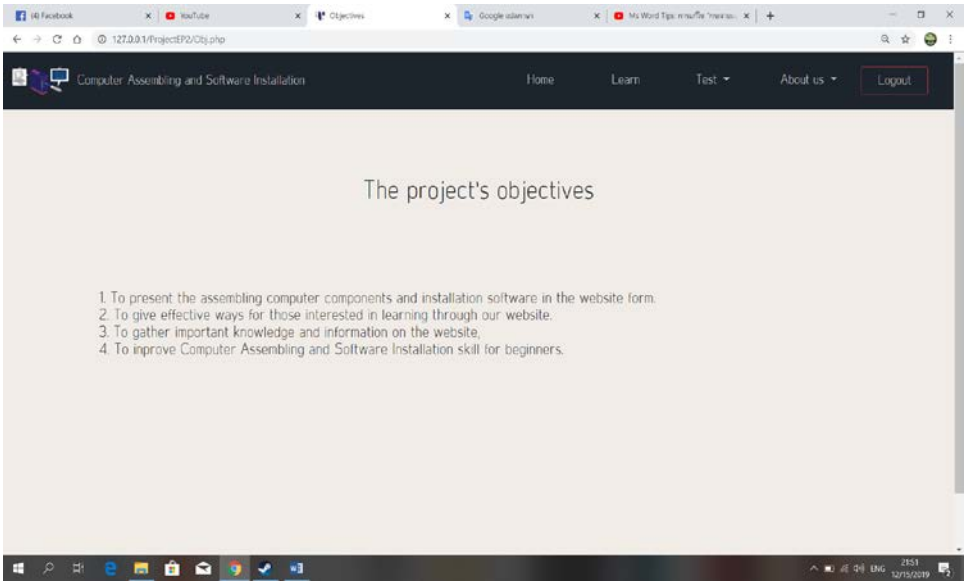


Fig. 4.34 Project's Objectives Page

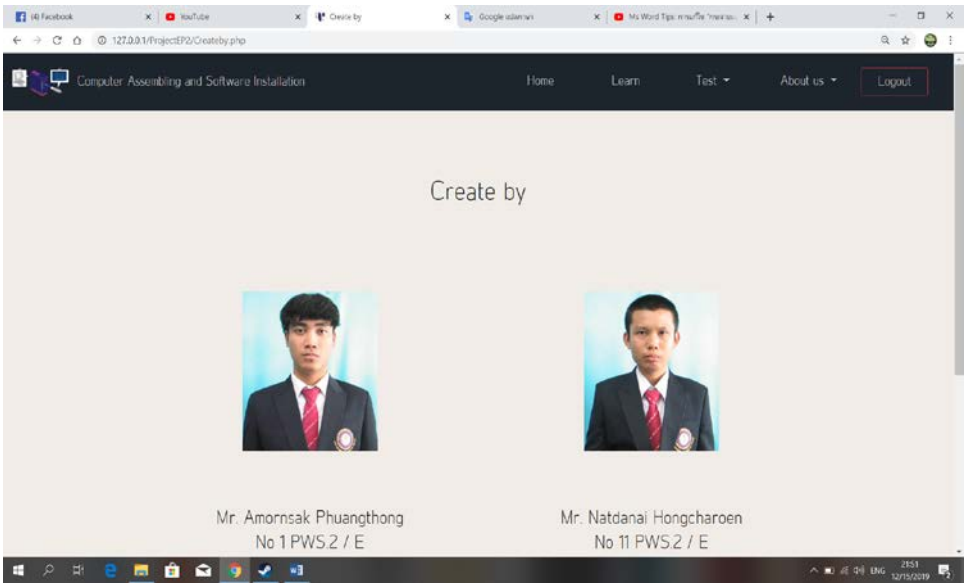


Fig. 4.35 Developer Page

4.3 How to install the program

Dreamweaver CS6

1. Open the Adobe Dreamweaver CS6 folder.

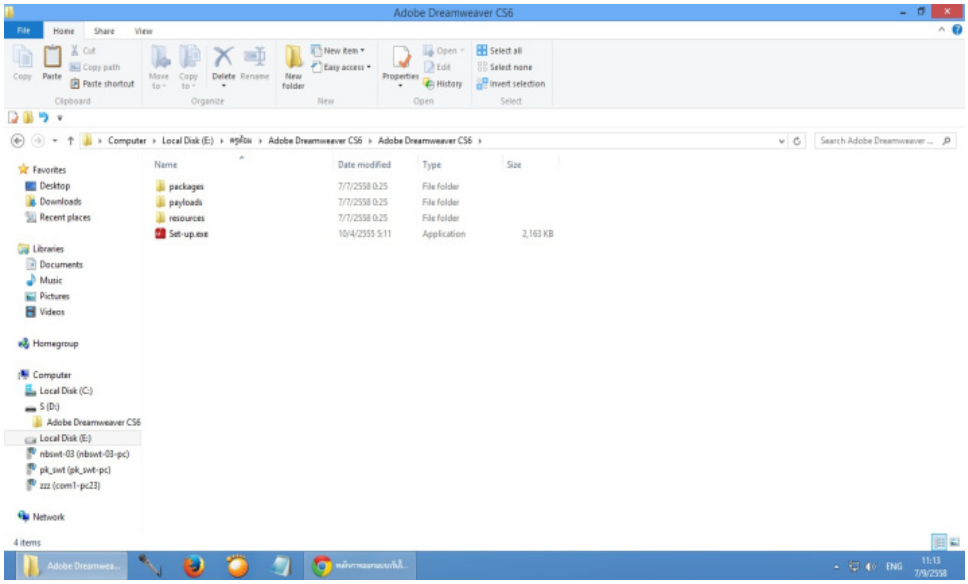


Fig. 4.1 Folder of Dreamweaver

2. Double click the Set-up.exe file and the program will notify you to restart. We choose Ignore to proceed as in the picture.

Fig. 4.2 Adobe installer

3. The program will check before installing the program.

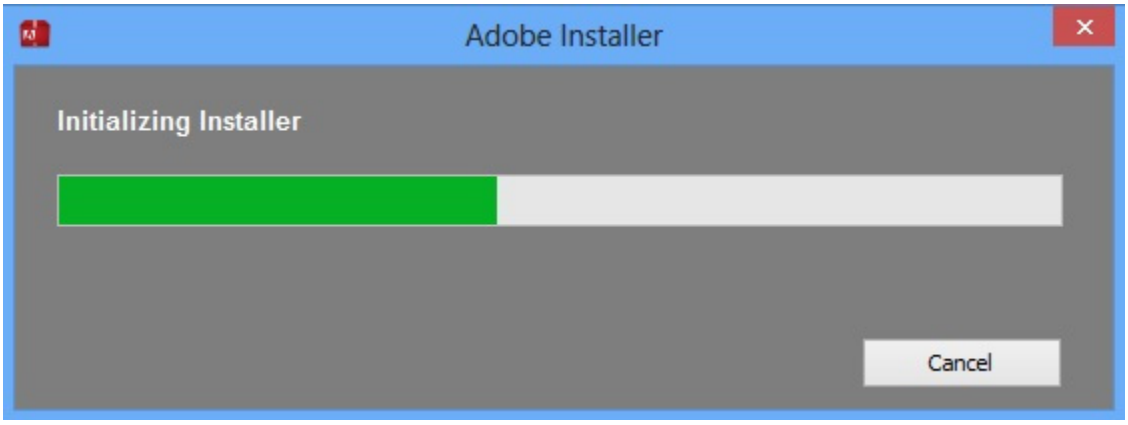


Fig. 4.3 Waiting

4. When the program has finished checking Will be taken to the screen to install the program for us, click Accept

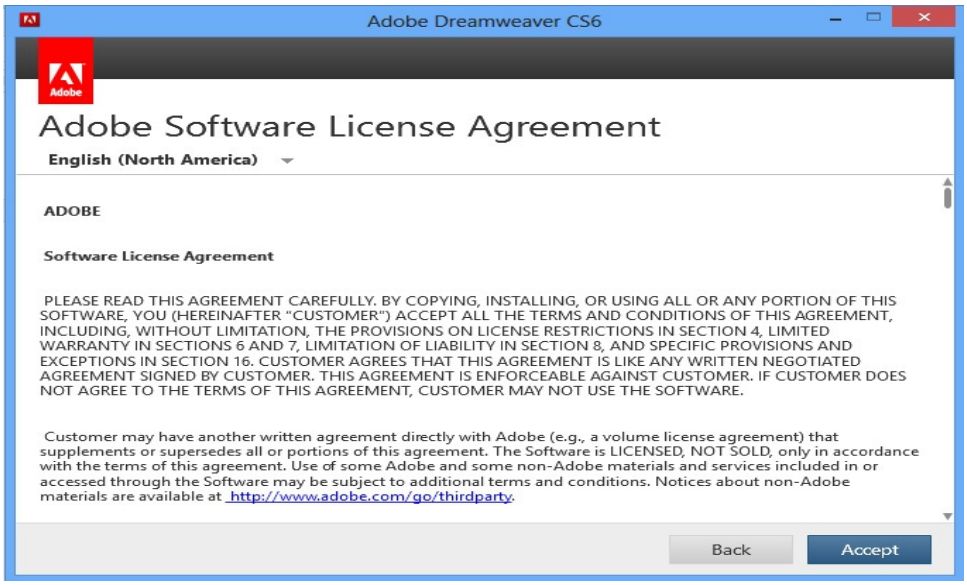


Fig. 4.4 License Agreement

5. Enter the Serial Number and click the Next button.

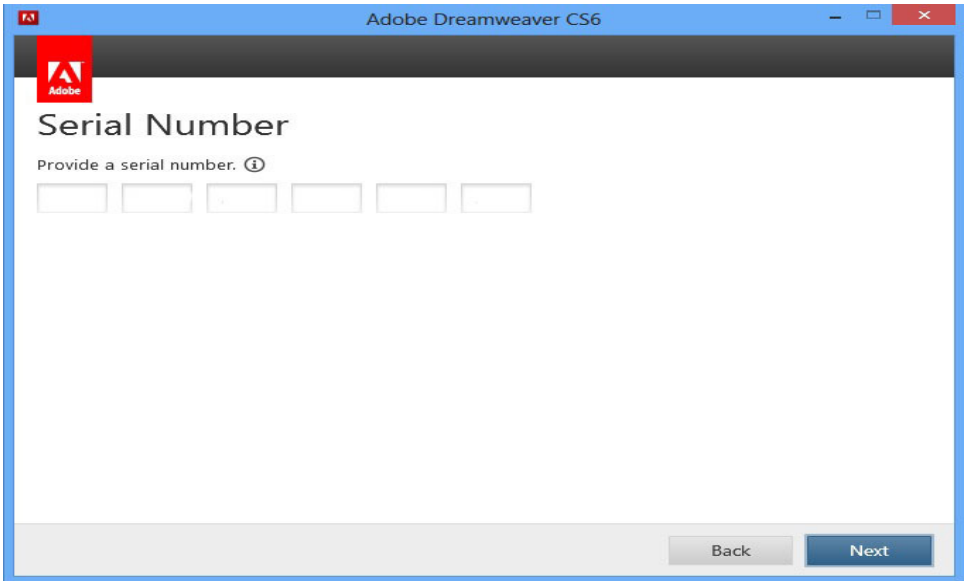


Fig. 4.5 Serial Number

6. Will enter the program options page, select Installs

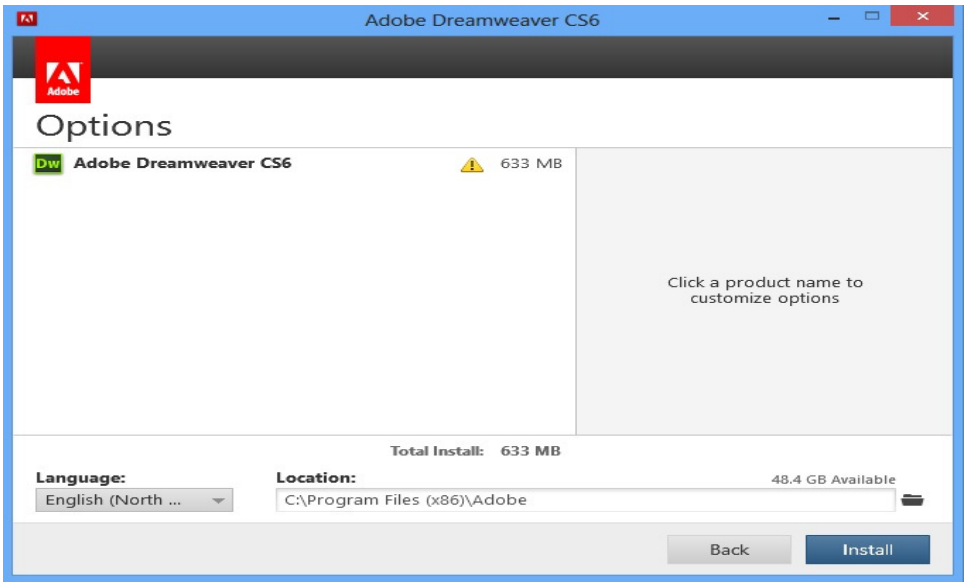


Fig. 4.6 Select Options

7. Wait for the program to finish installing.

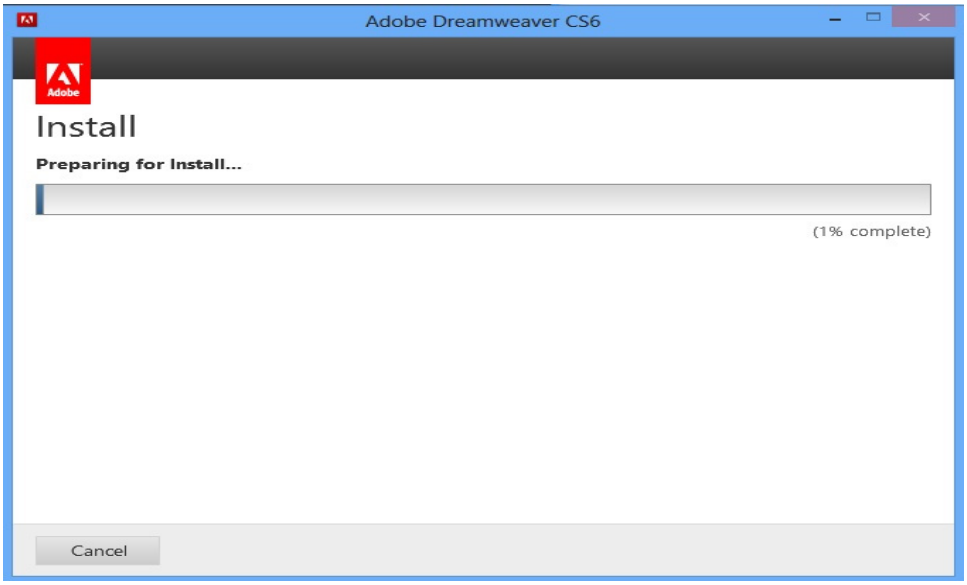


Fig. 4.7 Preparing for install

8. When the installation is complete, the screen will appear. As we click click Close.

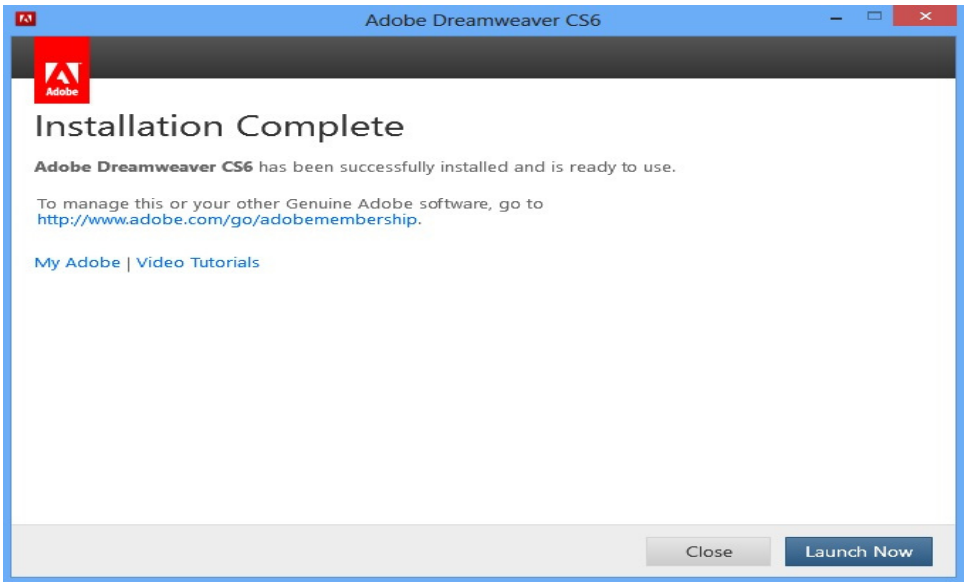


Fig. 4.8 installation Complete

The process of opening Adobe Dreamweaver CS6.

1. For Windows7, open Dreamweaver by going to the Start menu> All Programs> Adobe Dreamweaver CS6.

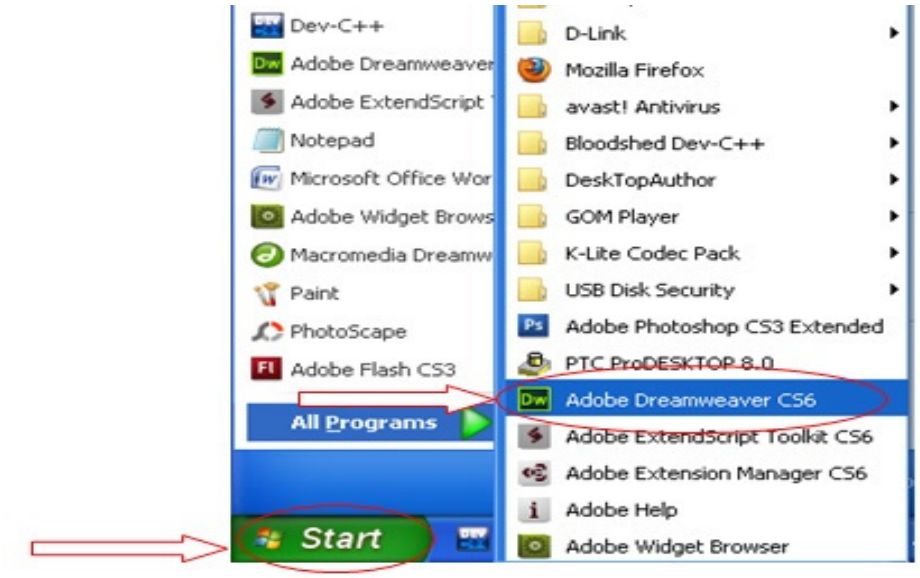


Fig. 4.9 How to enter the Dreamweaver

2. For Windows8, open Dreamweaver by going to Start Menu> Apps> Adobe Dreamweaver CS6.

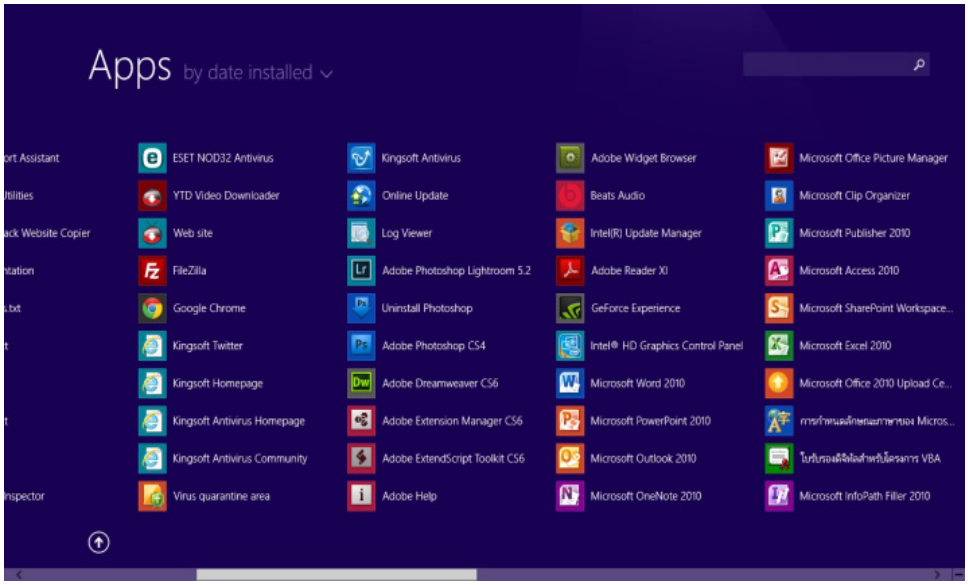


Fig. 4.10 For Windows 8

3. When opening the program for the first time You'll see the screen as shown. Click Select All >> OK.

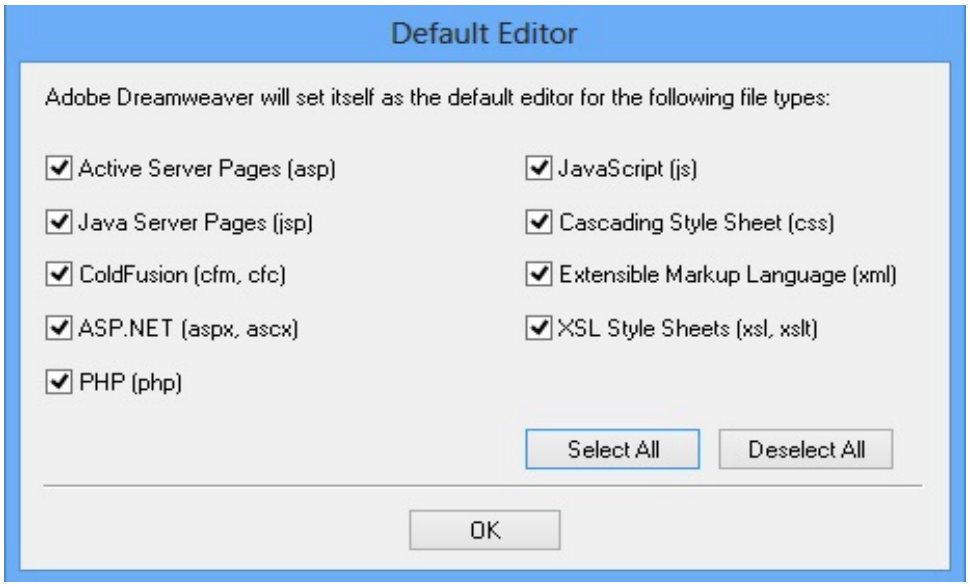


Fig. 4.11 Default Editor

4. And then will enter the Welcome Screen as in the picture

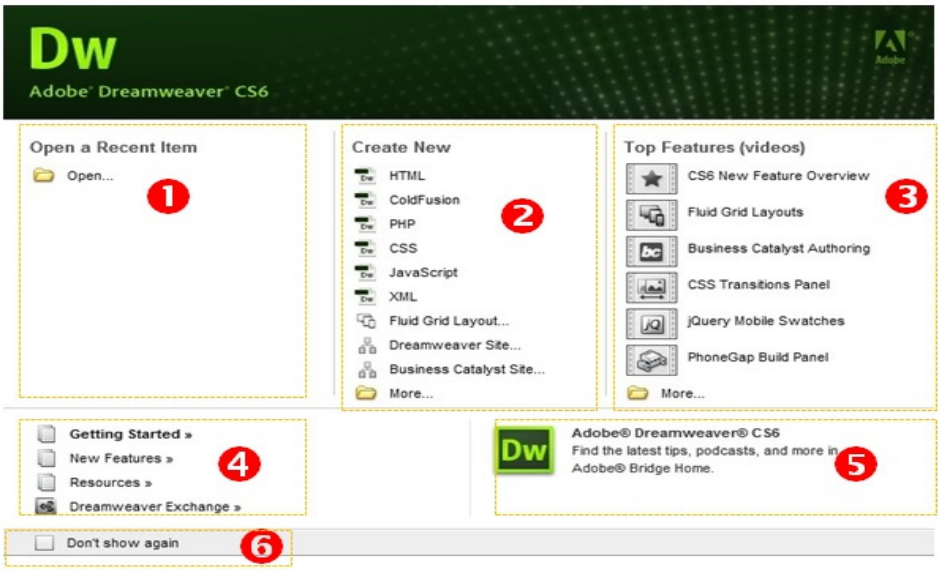


Fig 4.12 Welcome Screen

- **Welcome Screen is a tool to help select the initial steps for using the program. The options are divided into groups as shown.**
- **Number 1** Open a Recent Item Open the file used to use. By clicking on the list of names that are displayed (In order from most recently opened or click Open to open other files)
- **Number 2** Create New. Create a new file. Clicking HTML will create a basic webpage, but clicking another topic will create a webpage or file of that type.
- **Number 3** Top Features (videos) are shortcuts for accessing the program's details and techniques through the Adobe website.
- **Number 4**, open the program instructions
- **Number 5**. Download the program or view information on the Adobe website.
- **Number 6** Click this option if you do not want to display the Welcome Screen again next time.

4.4 How to install Appserv.

Prepare the program for installation.

Download the AppServ program from the website http://www.appserv.org. By choosing the version you want to install between versions 2.4.x and 2.5.x

Which the difference of these 2 versions is

2.4.x is the version that brings the package that is stable mainly Suitable for those who want the stability of the system.

By not focusing on using the new functions

2.5.x is the version that brings new packages especially for use Suitable for developers who need new systems.

Or want to test Try out the new functions. Which may not be 100% stable of the system

Because the package from the developer Still in the testing phase Try to find the error.

Steps to install AppServ

1. Double click the file. appserv-win32-x.x.x.exe To complete the installation Will appear on the screen.

Fig. 4.13 Setup Wizard

2. Enter the program terms of use. AppServ is distributed in the GNU License. If the installer Read various conditions finished If accepting the conditions, click Next to proceed with the installation. But if not accepting the conditions Click Cancel to exit the AppServ installation.

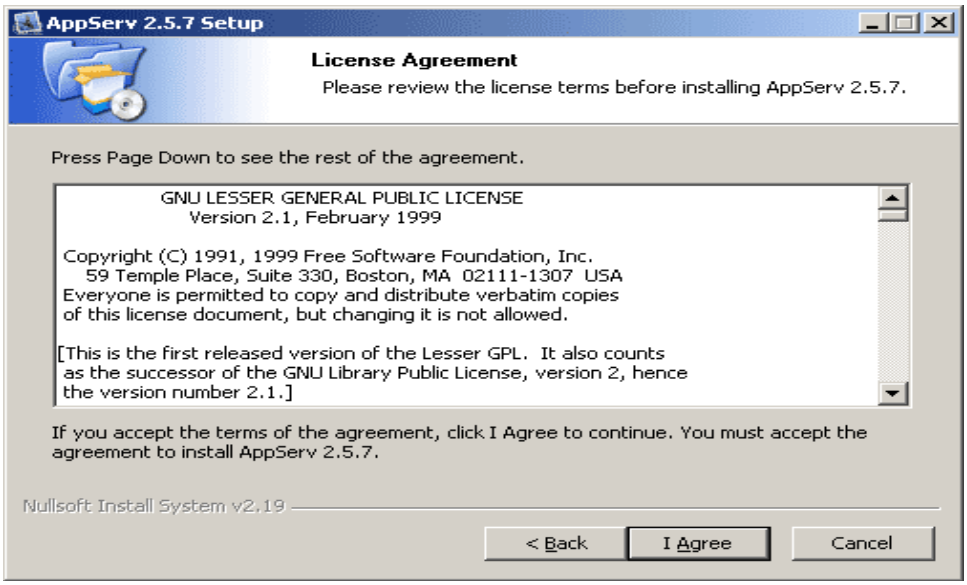


Fig. 4.14 License Agreement

3. Enter the step to select the destination you want to install. By default, the installation destination will be C: AppServ. If you want to change the destination, click Browse and select the desired destination When the destination is selected. Click Next to proceed to the next installation process.

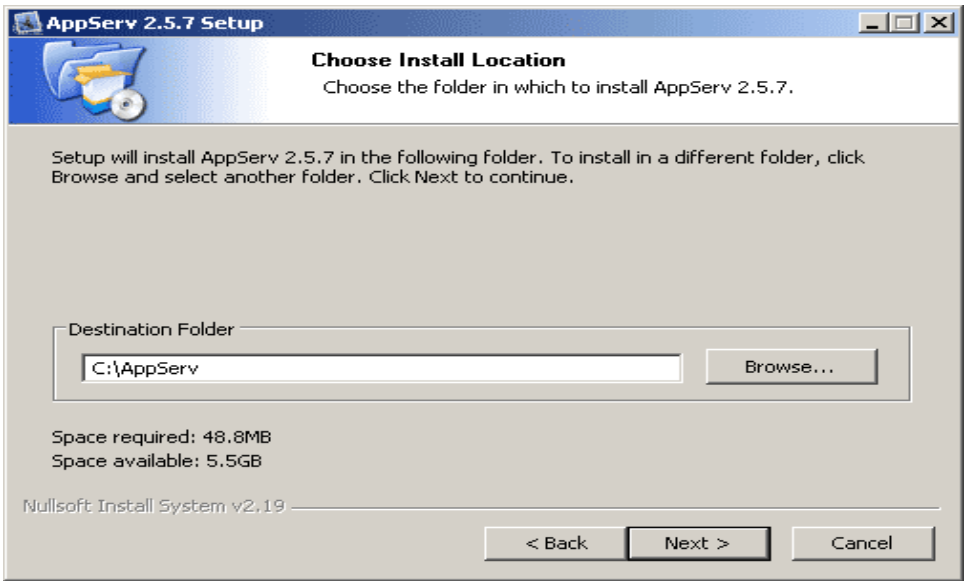


Fig. 4.15 Choose install Location

4. Select the Package Components you want to install. By default, will choose to install every package, but if the userWant to select specific packages, can choose according to the desired item. The details of each package are as follows

   - Apache HTTP Server is a program that makes a Web Server.
   - MySQL Database is a program that acts as a Database Server.
   - PHP Hypertext Preprocessor is a program that performs the processing of PHP language.
   - phpMyAdmin is a program used to manage MySQL databases through websites.

   When the package has been selected, click Next to proceed to the installation process.

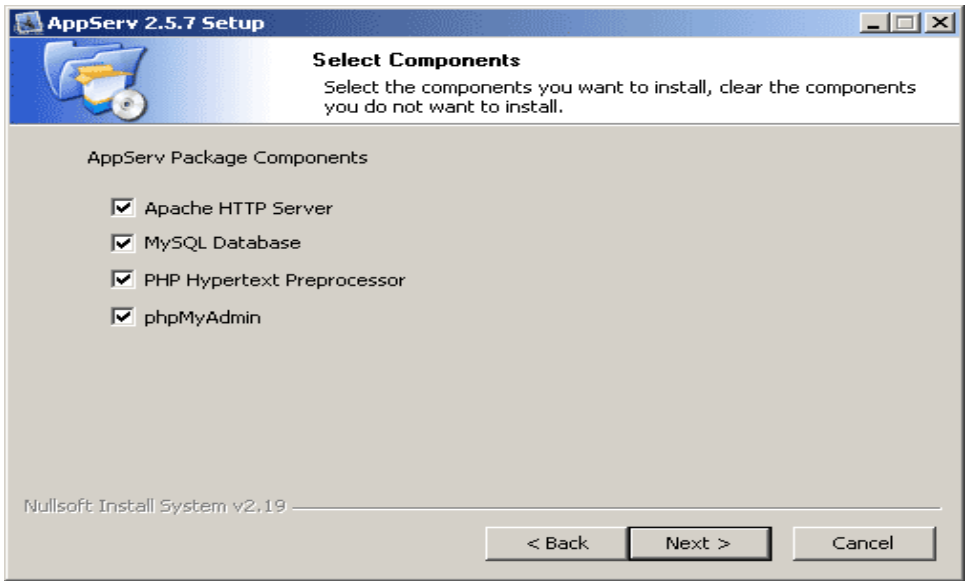


Fig. 4.16 Select Components

5. There are 3 parts of Apache Web Server configuration as shown in figure 5, which are Server Name is the field for entering your Web Server name such as www.appserv.org. Admin Email is a box for entering information. Admin email, such as root@appserv.org HTTP Port is a port for specifying the port to use for Apache Web Server. Generally, HTTP Will have a base value of 80. If you want to avoid using Port 80, you can edit it. If there is a change in the Port for accessing the Web Server every time you use the website It is also necessary to specify the Port number. For example, if you choose to use Port 99 for every website use, you must use http://www.appserv.org:99 In order to be able to access

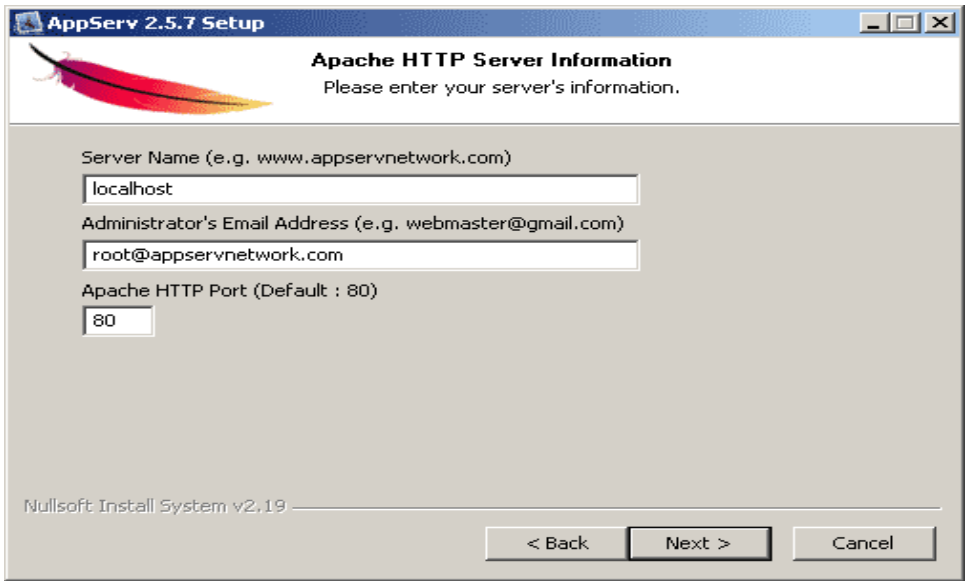


Fig. 4.17 enter your Server's Information

6. Configure the strength of the MySQL database. There are all 3 parts as in Figure 6:

   Root password The root password used by the root or system administrator. Every time the database is used as an administrator, specify the user root.

   Character sets used to configure the language system used to store databases, sort databases, import databases, export databases, contact database, old passwords

   If you have a problem using the old version of the PHP API

   The error was encountered. The client does not support the authentication protocol requested by the server. consider upgrading MySQL client, Choose Old Password to avoid this problem.

   Enable MyISAM. If you want to use the database in the MyISAM format, select this section as well.

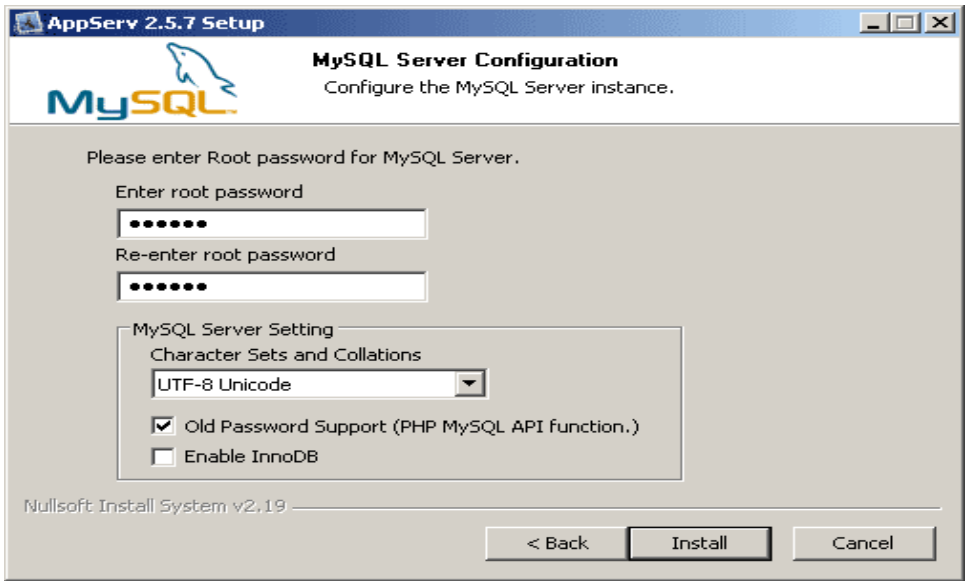


Fig. 4.18 Enter Password

7. End the AppServ installation process. For this last step, there will be a choice whether to instruct Apache and MySQL to run.

   Immediately or not, then press the Finish button to finish installing the AppServ program.

Fig. 4.19 Complete installation

4.5 The Step to Use the System

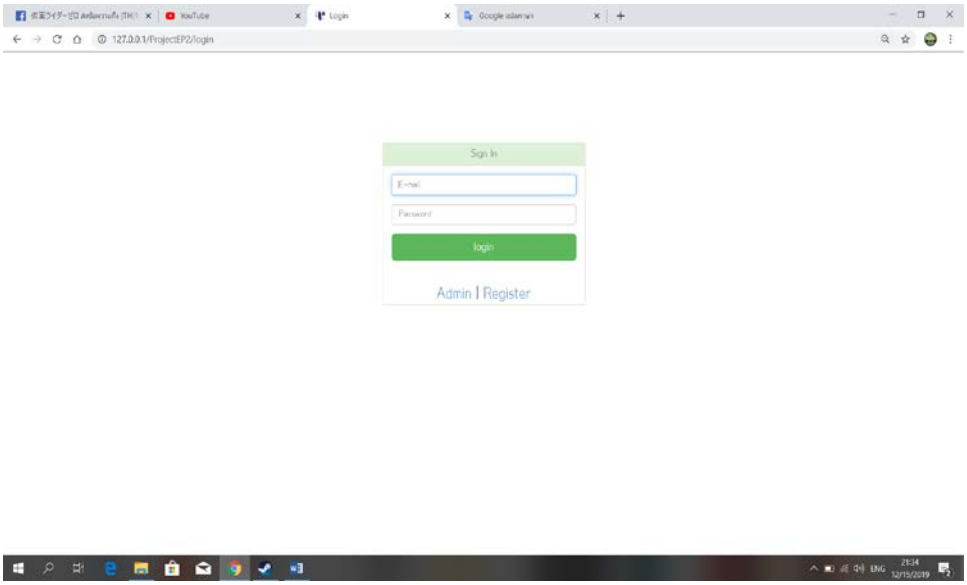


Fig. 4.20 Login Page

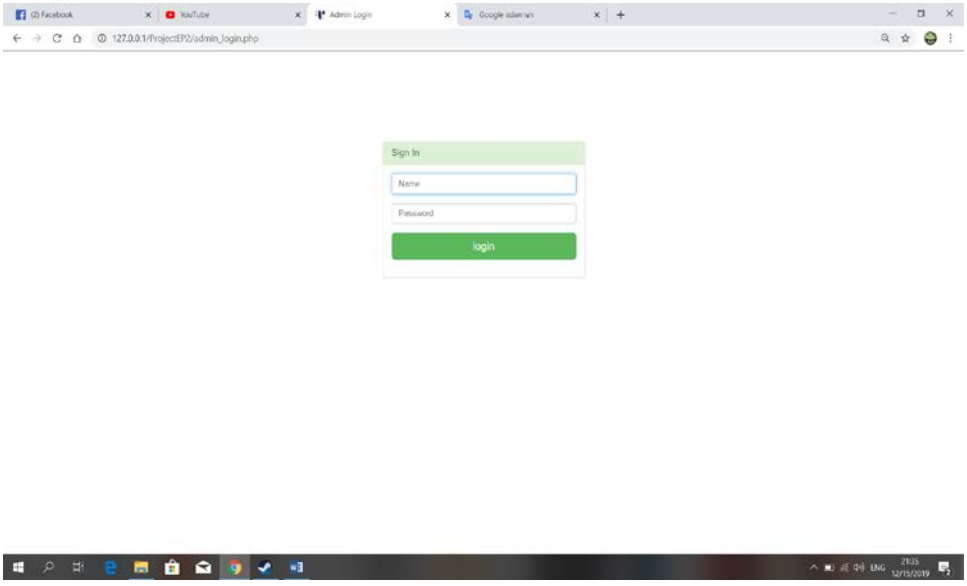


Fig. 4.21 Login Page (For Admin)

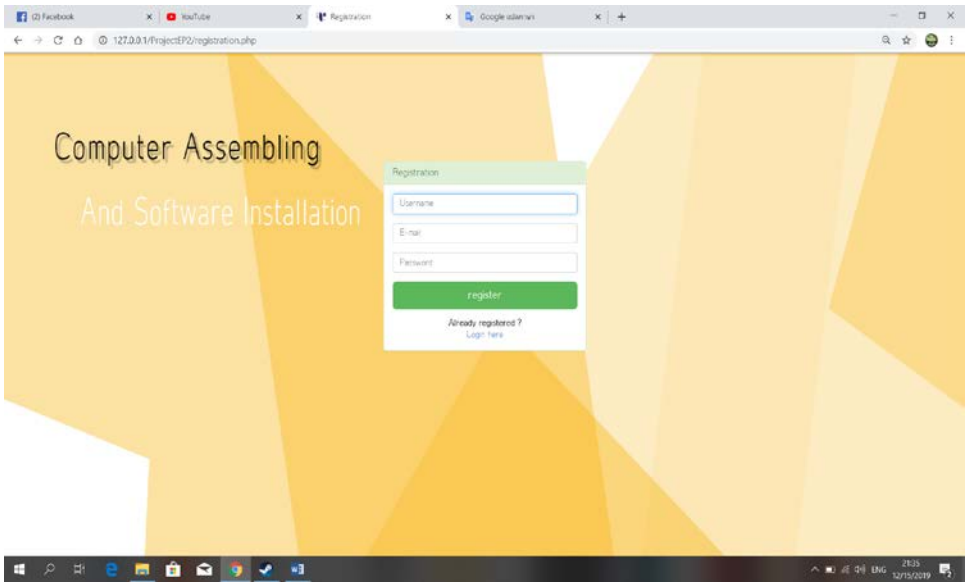


Fig. 4.22 Register Page

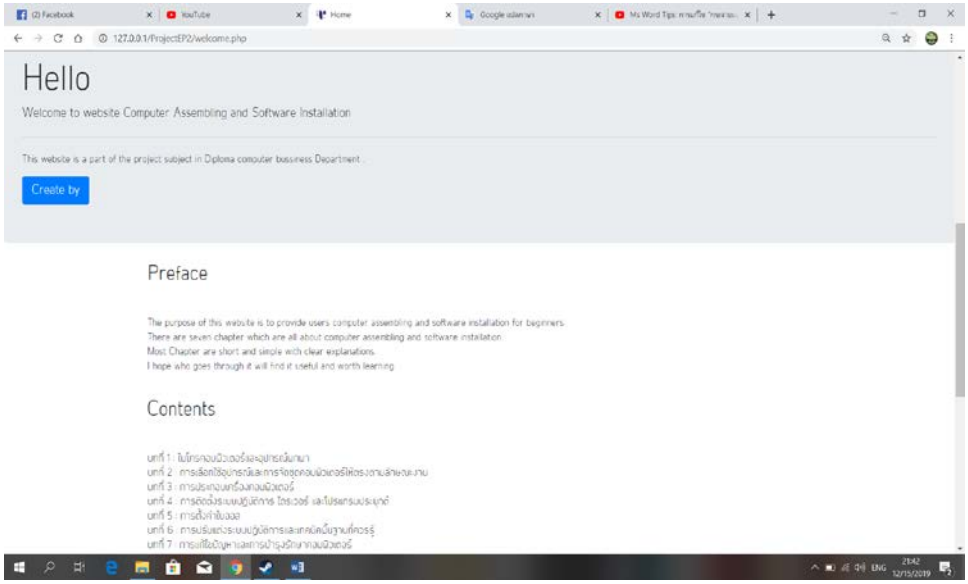


Fig. 4.23 Home Page

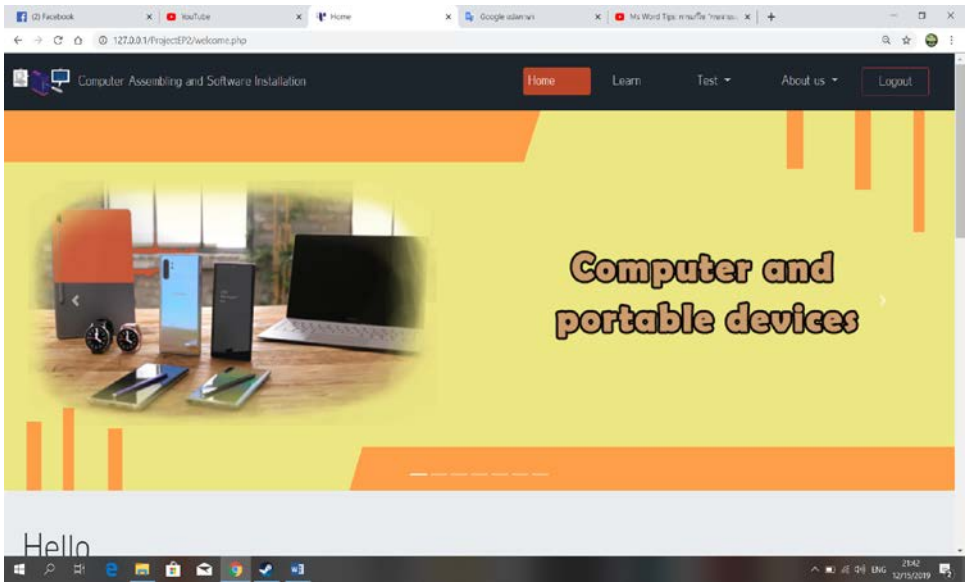


Fig. 4.24 Banner and Button

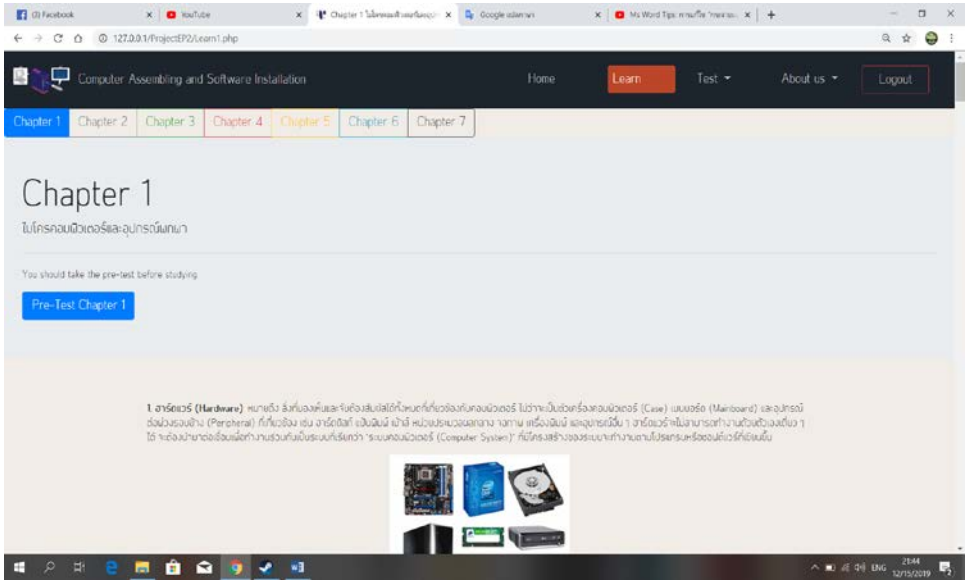


Fig. 4.25 Chapter 1 Lesson

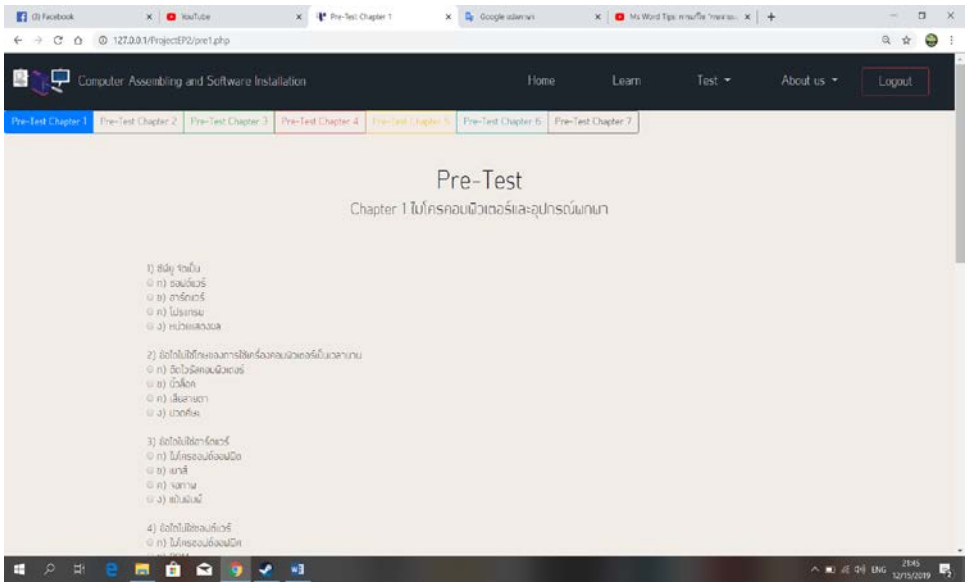


Fig. 4.26 Pre-test of chapter 1 Page

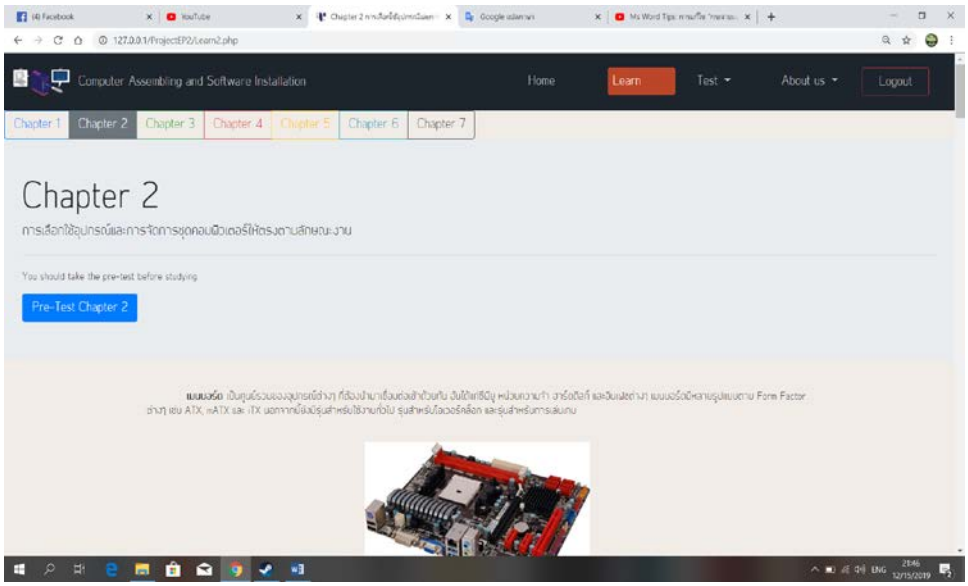


Fig. 4.27 Chapter 2 Page

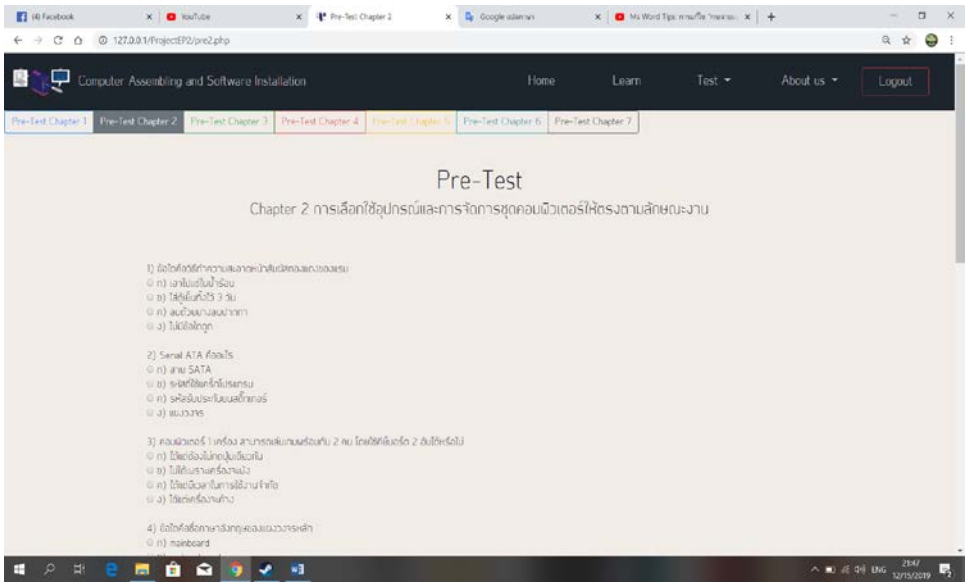


Fig. 4.28 Pre-test of Chapter 2 Page

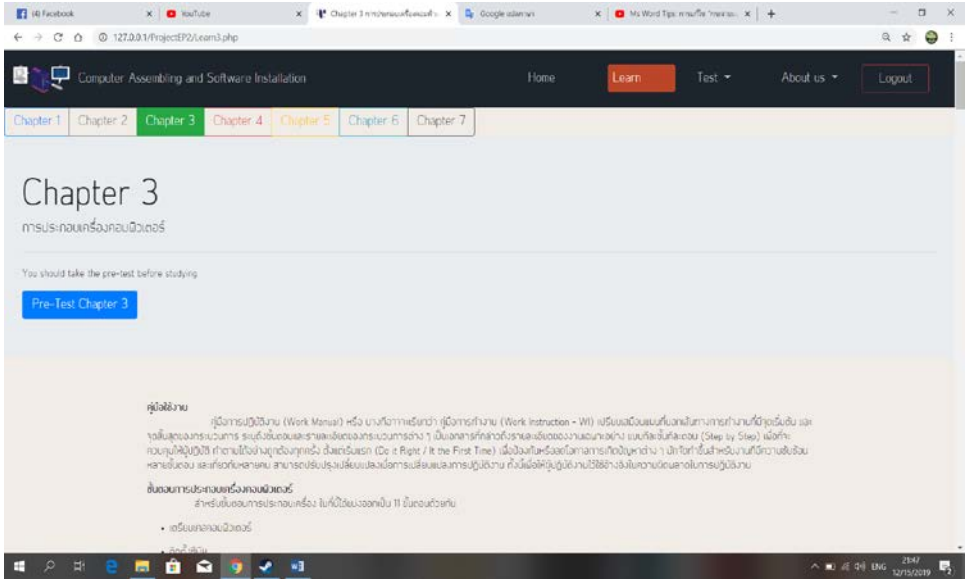


Fig. 4.29 Chapter 3 Page

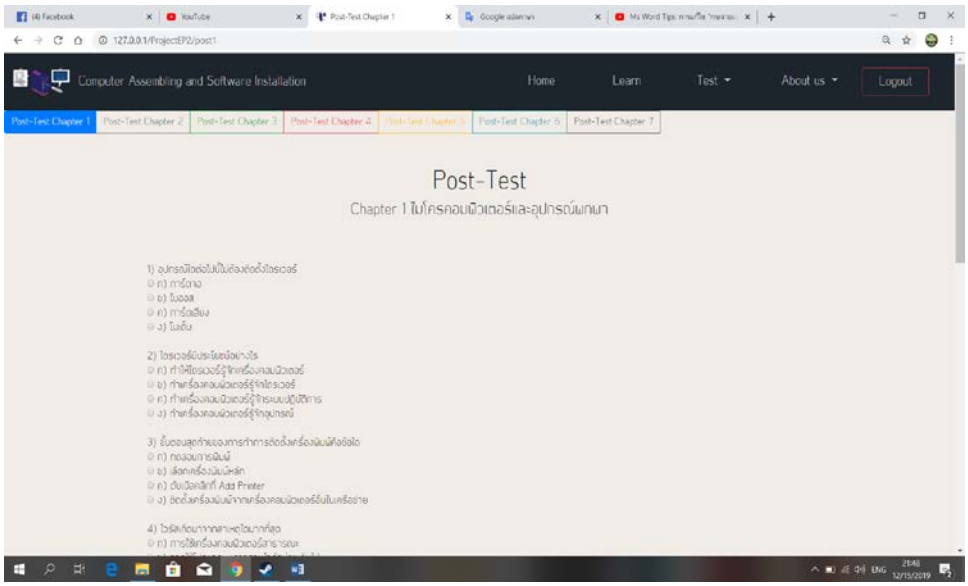


Fig. 4.30 Post-Test of Chapter 1 page

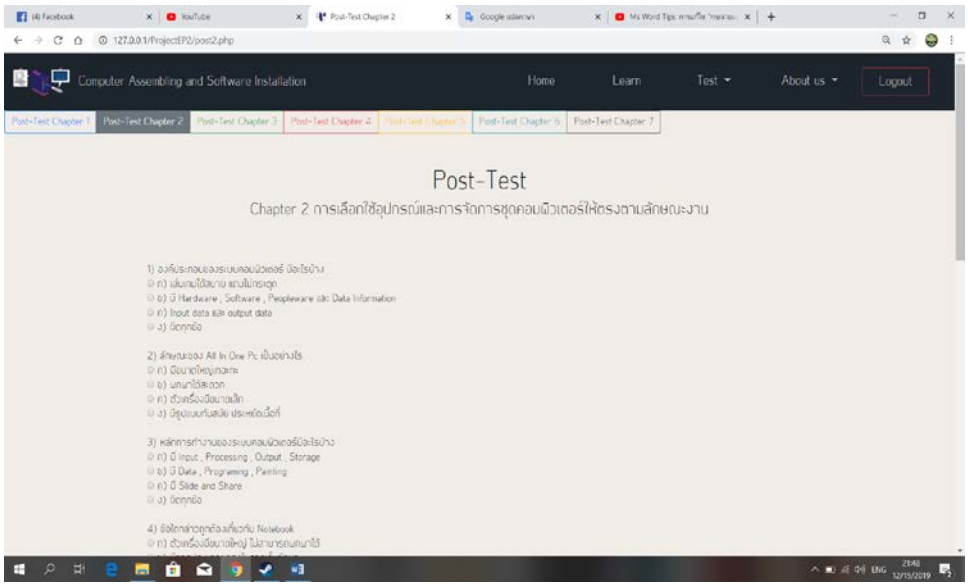


Fig. 4.31 Post-Test of Chapter 2 Page

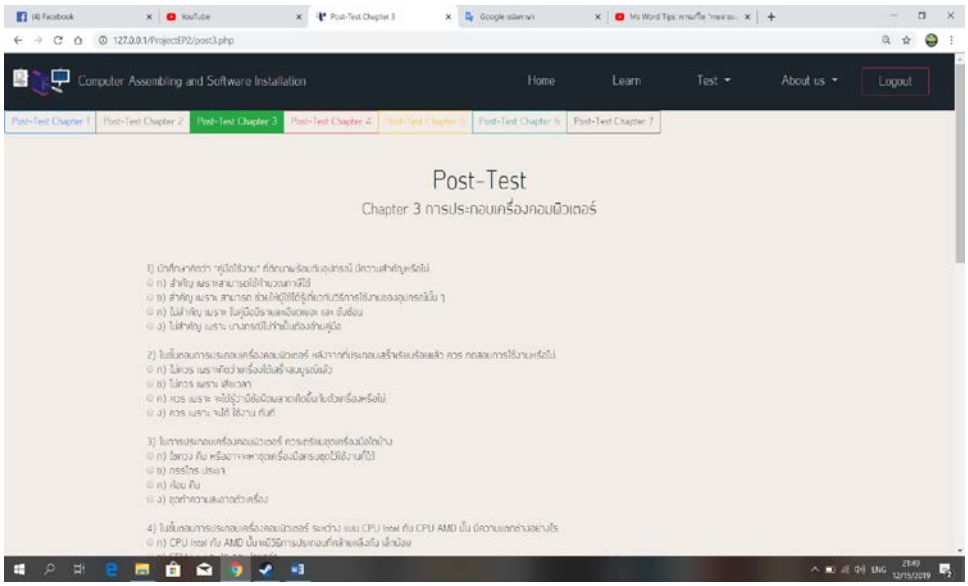


Fig. 4.32 Post-Test of Chapter 3Page

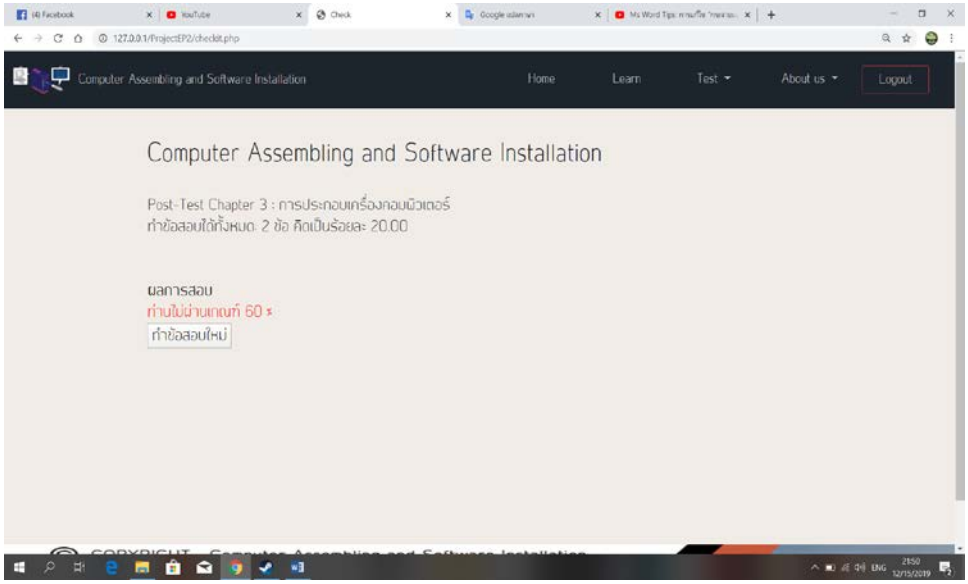


Fig. 4.33 Check Score Page

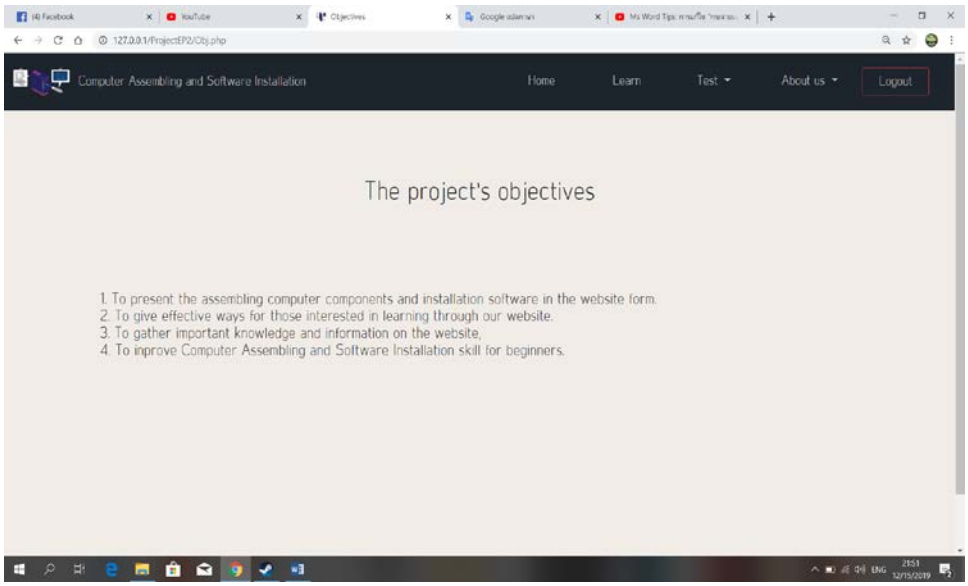


Fig. 4.34 Project's Objectives Page

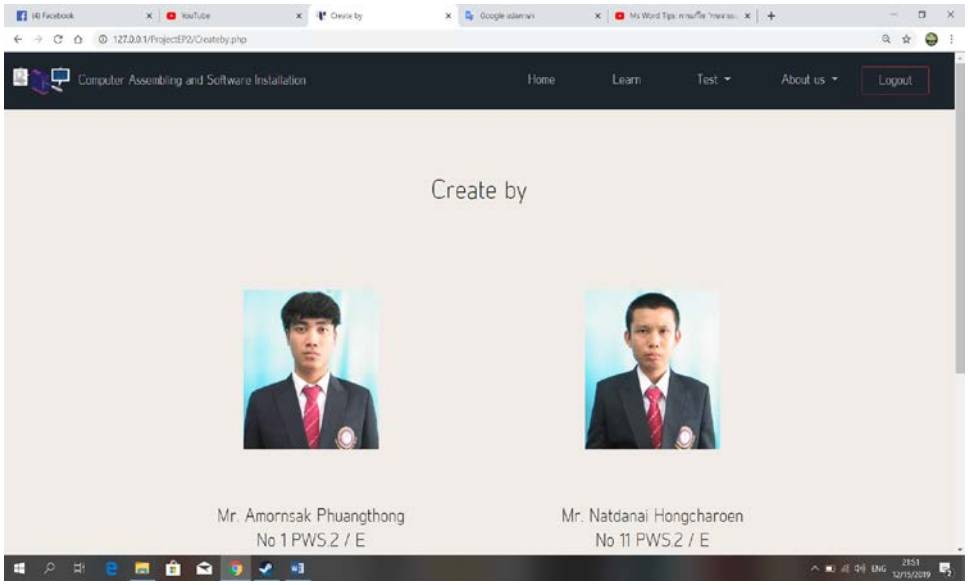


Fig. 4.35 Developer Page

Chapter 5

Summary of the project

5.1 Summary of the Project

1. Have developed a website for the students to get more knowledge and understanding about computer assembly and software installation.
2. Have developed a website that can be used as teaching and learning media about computer assembly and software installation.
3. Have developed a website that which has pre-test to evaluate the students' knowledge of before learning lessons from our web and has a post-test to evaluate students' knowledge after learning lessons from our website.
4. Have developed a website that allows users to gain the knowledge which can apply in everyday life.
5. Have developed a website that allow users to learn knowledge about computer assembly and software installation at anytime and anywhere.

5.2 Problems and difficulties during developing the system

1. The content on the website is not interesting for visitors.
2. There is no password confirmation for the registration in the website.
3. The group Members live far away from each other and difficult to arrange the time to work together.
4. Group members don't have enough knowledge to develop the E-learning web design.
5. The time to complete the project is too less and developers have to be hurry to finish it.
6. Developing the web application is very difficult and complicated.

5.3 Actual Time Schedule

List term 1	June 62				July 62				August 62				September 62				Date
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Student project training																	11 -12 JUN 62
Proposed project topic (Chapter 1)																	14 JUN 62
Announcement of topic results																	17 JUN 62
Proposed project topic																	19 JUN 62
Announcement of topic results																	21 JUN 62
Register online topics, present a joint advisor.																	18 - 30 JUN 62
Send document Chapter 2																	8-14 JUL 62
Send document Chapter 3																	18-31 JUL 62
Examination presentation of project topics																	17 AUG 62
Announcement of test results																	22 AUG 62
Send progress 50%																	9-15 SEP 62
Send progress 60%																	16-22 SEP 62
Send progress 70%																	23-30 SEP 62
List term 2	**November 62**				**December 62**				**January 63**				**February 63**				**Date**
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Send progress 90%																	1-8 NOV 62
Send progress 100%																	9-13 NOV 62
Project presentation exam																	7 DEC 62
Announcement of test results																	11 DEC 62
Send document Chapter 4																	6-19 JAN 63
Send document Chapter 5																	20-26 JAN 63
Send budget for the project																	26-30 JAN 63
Send a CD, book																	1-20 FEB 63

Table 5.1 Actual Time schedule

Planning operation

Actual working time

5.4 Actual Budgets

No.	The List	Quantity	Price (Bath)
1	Copy Paper A4 80 GSM.	2 Ream	238
2	Printing Ink	2 Bottle	670
3	Printer	1 Machine	1,900
4	Internet Service Fee	3 Month	300
5	Binding Values	1 book	250
6	Setting CD Box	1 Box	50
		Total	**3,408**

Fig 5.2 Actual budget to complete the project

Reference

Andrews, Jean. (2016) **A+ Guide to Managing and Maintaining Your PC**. 4th Edition, America: Couse Technology, Cengage Learning

Chanida Kaewphet. (2017). **PHP theory**. Search 14 October 2019, Fromhttp://ba2it.rmutsb.ac.th/Suphan /coop/FileDownload/10.pdf

Likhit Yuenboon. (2016). **PHP MyAdmin**. Search 15 October 2019 From https://saixiii.com /what-is-phpm yadmin/

Nurayani Lee Din Sud. (2016). **Adobe Dreamweaver CS5**. Search 15 October 2019, From https://sites.g oogl e.com/site/nur1910200065246/prawati-phu-cad-tha-1

Microsoft (Thailand) Company Limited. (2017). **Visual Studio**. Search 16 October 2019, From https:// support.microsoft.com /th-th/help/ 983509/description-of-visual-studio-2010-service-pack-1.

Morris Rosenthal. (2016) **Build Your Own PC**. 4th Edition, McGraw-Hill Companies

Rungthiwa Chomngam. (2016). **Symbols in database design**. Search 16 October 2019, From https: //www.lucidchart.com/pages/ER-diagram-symbols-and-meaning

Thidarat Chuen Thongchai. (2016). **Adobe Photoshop CS5**, Search 15 October 2019, From https://sites.google.com/site/combnw/Photoshop-khux-xari

Thanin Kongsila. (2016). **HTML theory**. Search 15 October 2019, From http://pirun.ku.ac.thagrtnk/web/unit1-2.html

Varindan Kuan. (2018). **Database system.** Search 20 October 2019, From https://sites.google.com/site/thek hnoloyisarsnthesit/xngkh-prakxb-khxng-thekhnoloyi-sarsnthes/than-khxmul-database

Woraphop Prabunprasit. (2018). **Color Theory**. Search 20 October 2019, From https://www.shutterstock.com /th/blog/complete-guide-color-in-design/

Appendix

- ATC. 01 Project Title Approval
- ATC. 02 Request Permission to be a Co-Advisor
- ATC. 03 Progress Project Presentation
- ATC. 04 Progressive Report of Computing System
- ATC. 05 Record of Submitting Documents
- ATC. 06 Requesting permission from advisors to create documents

Biography

Mr. Amornsak Phuangthong (OAD) was born on 26 June 1999,

finished vocational education from Attawit Commercial Technology College.

And now studying in higher vocational school, English Program, Major in

Business Computing at Attawit Commercial Technology College.

Mr. Nutdanai Hongcharuen (Kwan) was born on 10 May 2000,

finished vocational education from Attawit Commercial Technology College.

And now studying in higher vocational school, English Program, Major in

Business Computing at Attawit Commercial Technology College.

Home address: 41/91 M.19, Soi Rongleak , Pu Chao Samingphrai

Rd. Samutprakan 10130

Telephone No: 061-987-4177

Email address: kwanzaza60@gmail.com

ATC. 05

Record of Submitting Documents and Program

Major in Business Computing

Attawit Commercial Technology College

Sheet 8

Group Members: 1. Mr. Amornsak Phuangthong Student Code 36884 Level EP.2

2. Mr. Nutdanai Hongcharuen Student Code 37773 Level EP.2

Project Category: E - Learning

Name of Project: E-Learning online for Assembling Computer Components and Installation Softwares

Advisor: Ms. Ohmar Thwin

Co – Advisor: Ms. Thitirut Naiyapat

No.	Date	Topic	Signature	Remarks

ATC. 01

Project Title Approval

Major in Business Computing

Attawit Commercial Technology College

June 13, 2019

Subject : Project title Approval

To : The committee member

Group Members: 1. Mr. Nutdanai Hongcharuen Student Code 37773 Level EP.2

2. Mr. Amornsak Phuangthong Student Code 36884 Level EP.2

We are developing the computer system with E-learning

Thai Name : สื่อการเรียนการสอนออนไลน์วิชาการประกอบเครื่องคอมพิวเตอร์และติดตั้งซอฟต์แวร์

English Name : E-Learning online for Assembling Computer Components and Installation Softwares

Advisor : Ms. Ohmar Thwin

We would like to request your approval for our project's tile.

Please kindly check and approve.

Signature.....Students

(Mr. Amornsak Phuangthong)

Group Leader

☐ Approve ☐ Not Approve

The Board of Committee Members.....

.....

Signature..... Signature.....

Committee Member Committee Member

ATC. 02

Request Permission to be a Project Co-Advisor

Major in Business Computing

Attawit Commercial Technology College

June 26, 2019

Subject : Request Permission to be a Project Co-Advisor

To : Ms. Thitirut Naiyapat

Group Member : 1. Mr. Amornsak Phuangthong Student Code 36884 Level EP.2

2. Mr. Nutdanai Hongcharuen Student Code 37773 Level EP.2

We would like to invite Ms. Thitirut Naiyapat to be a project committee member of our group. We will develop the system with E-Learning name as “E-Learning online for Assembling Computer Components and Installation Softwares”

We have also attached of the documents regarding the project’s topic.

Please kindly determine and allow.

Signature.....Student Signature.....Student

(Mr. Amornsak Phuangthong) (Mr. Nutdanai Hongcharuen)

Signature.....Co-Advisor

(Ms. Thitirut Naiyapat)

ATC. 03

Project Presentation

Major in Business Computing

Attawit Commercial Technology College

November 16, 2019

Subject : Project Presentation to defend the project related to business computing system. (2nd Time)

To : Committee members of the board

Group Member: 1. Mr. Amornsak Phuangthong Student Code 36884 Level EP.2

2. Mr. Nutdanai Hongcharuen Student Code 37773 Level EP.2

We are developing the computer system with E-Learning.

Thai Name : สื่อการเรียนการสอนออนไลน์วิชาการประกอบคอมพิวเตอร์และติดตั้งซอฟต์แวร์

English Name : E-learning for Assembling Computer Components and Installation Softwares

By Advisor : Ms. Ohmar Thwin

Co - Advisor : Ms. Thitirut Naiyapat

With attached materials to evaluate the project.

☑ Software 1 set

☑ Document (Chapter1-3) 1 set

Please kindly check and approve.

Signature.....Students

(Mr.Amornsak Phuangthong)

Group Leader

ATC. 04

Project progress Report to Advisor and Co - Advisor

โครงการ สื่อการเรียนการสอนออนไลน์ วิชาการประกอบเครื่องคอมพิวเตอร์และติดตั้งซอฟต์แวร์

E-Learning online for Assembling Computer Components and Installation Softwares

Advisor: Ms. Ohmar Thwin

Co – Advisor: Ms. Thitirut Naiyapat

No.	Job Description	DD/MM/YY	Advisor	Co - Advisor
Semester 1/2562				
1	Proposed project topic and Chapter 1	...../...../.....		
2	Chapter 1 document	...../...../.....		
3	Chapter 2 document	...../...../.....		
4	Chapter 3 document	...../...../.....		
5	Send documents and PowerPoint presentation and make the progress presentation	...../...../.....		
6	50% progress of the system	...../...../.....		
7	60% progress of the system	...../...../.....		
8	80% progress of the system	...../...../.....		
Semester 2/2562				
9	100% progress of the system	...../...../.....		
10	Send documents and PowerPoint presentation and make the final presentation to defend the project	...../...../.....		
11	Chapter 4 document	...../...../.....		
12	Chapter 5 document	...../...../.....		
13	Submit the completed document	...../...../.....		
14	Submit CD	...../...../.....		
15	Payment for binding report	...../...../.....		

ATC. 06

Requesting permission from advisors to create documents

Major in Business Computing

Attawit Commercial Technology College

February 10, 2020

Subject : Requesting permission from the advisor to make a joint document, chapter 4-5

To : Ms. Thitirut Naiyapat

Group Member : 1. Mr. Amornsak Phuangthong Student Code 36884 Level EP.2

2. Mr. Nutdanai Hongcharuen Student Code 37773 Level EP.2

Wishing to request permission to prepare the doctoral documents chapter 4 and chapter 5 because the program has been completed according to its objectives

Please kindly determine and allow.

Signature.....Student Signature.....Student

(Mr. Amornsak Phuangthong) (Mr. Nutdanai Hongcharuen)

Signature..... Co-Advisor

(Ms. Thitirut Naiyapat)