

Design and Implementation of an Interactive Website for The Curriculum System

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Abstract: The e-curriculum is an important educational system, because it enters the world of e-learning and gives people who cannot follow the traditional curriculum the total dependence on electronic curricula. In addition, it remains interactive with the development of educational technology and its use for self-development of the person, because it is available to the user at anytime and anywhere. This project allows the provision of curricula for all students to help them read and download any systematic book for any stage of the study, from the primary to the postgraduate level, thus saving time, effort and research. The PHP, CSS, and HTML languages were used to build this site for the purpose of providing an integrated and efficient system.

Keywords: e-Curriculum, PHP, CSS, HTML

I. INTRODUCTION

The main objective of the curriculum is to enable students to acquire and develop knowledge, skills, values, and associated abilities and competencies, to lead meaningful and productive lives. Key indicators of curriculum success include the quality of learning that students have, and the effectiveness of students' use of learning to develop personal, social, physical, cognitive, moral and psychological. A good curriculum enhances the potential for effective learning promotion. University students are increasingly choosing to purchase e-textbooks for their mobile devices as an alternative to traditional textbooks. This study examines the relationship between textbook format and 538 university students' grades and perceived learning scores. Results demonstrate that there was no difference in cognitive learning and grades between the two groups, suggesting that the electronic textbook is as effective for learning as the traditional textbook. The mean scores indicated that students who chose e-textbooks for their education courses had significantly higher perceived affective learning and psychomotor learning than students who chose to use traditional print textbooks [1].

This study aims to develop e-learning contents for multimedia technology lesson with the purpose to assist students in learning the subject. The multimedia game was used to make the lesson more interesting and at the same time to provide students with real example of how multimedia works. The effectiveness of the developed contents was studied by comparing results of the same test from students taking conventional class-room lectures and those using the developed e-learning contents. We found that the latter performed better at the statistical significance level of 0.05 [2].

Learning analytics is receiving increased attention, in part because it offers to assist educational institutions in increasing student retention, improving student success, and easing the burden of accountability. Although these large-scale issues are worthy of consideration, faculty might also be interested in how they can use learning analytics in their own courses to help their students succeed. In this paper, we define learning analytics, how it has been used in educational institutions, what learning analytics tools are available, and how faculty can make use of data in their courses to monitor and predict student performance. Finally, we discuss several issues and concerns with the use of learning analytics in higher education [3].

A website comprises of numberless pages that present information on any subject and connected together with hyperlinks, that is the fundamental part of the website. Website design tools are a combination of markup language and scripting languages. The languages that have been used in the design of the website are HTML, CSS, PHP and MYSQL [4].

II. IMPLEMENTATION OF INTERACTIVE WEBSITE FOR THE CURRICULUM SYSTEM

This website is designed to help students at all levels read, download and review any of their textbooks. It also helps postgraduate students to view and download their lectures by professors. The languages that have been used in the design of the website are HTML, CSS and PHP. Some of ready-made scripts have included in the implementation process. The web design and development applications called 'Dreamweaver' and 'wordpress' has been used. In addition, the graphics editing programs called 'Photoshop' and 'Paint' has been utilizes.

The data gathering process includes gathering all the required information about Interactive Website for The Curriculum System, writing the required needs and preparing all necessary resources to build the website. The website consists of many pages and the main interface, which includes all the basic information about The Curriculum System, and It also presents the latest news on curricula and schools as well as the latest IIPS news the website and the main services. Through the main page all visitors can access to The Curriculum System.

A. The Structure of the website Page

The structure of the website page must to be chosen before considering the visuals. The information architecture used to describe the planning of a website's structure. There are two types of navigation structures that will eventually translated to the navigation menus: wide and deep. In wide navigation system, the main pages are all visible together and for small sites. An alternative method for organizing content is deep navigation, which simplifies the main navigation and groups related pages into categories. The deep navigation system is selected for The Curriculum System website, because it is the optimal solution for a large website, drop-down menus and secondary navigation menu. So the overall website map is illustrated in figure 1.

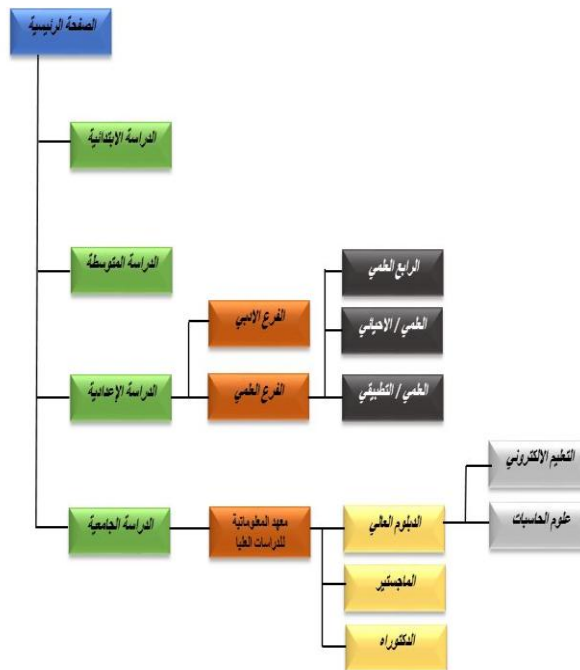


Fig 1. The General Diagram

B. Creating the data base

To designing a login system, guestbook page, the database has been worked for the website using PHP and MYSQL languages. The database contain many tables, it must be a connection between the client and the server, in order to access the data base information, this process can be executed by using PHP statement:

Mysql_connect() function. In addition to making a connection, the database must be closed automatically when the script ends. Closing operation can be executed by using the PHP statement:

Mysql_close() function. Database consist of one or more tables; each table consist of a number of many records, so the database created by using MYSQL languages that included statement: "CREATE DATABASE databasename". This statement can be done by using: mysql_query() function in PHP. After creating the database, for example "study_db", now on or more tables can be built inside the database, this process is performed by using: MYSQL statement: "CREATE TABLE tablename".

| NO. | NAME | E-MAIL | TYPE |
|-----|-------------------|-------------------------|--------|
| 1 | Mohammed Ali Abas | moh@yahoo.com | member |
| 2 | Matham Abud-Allah | Matham1980@gmail.com | member |
| 3 | Ahmed abed M. | Ahmed.abed535@gmail.com | admin |

Figure 2. Example of a simple database

C. Technology Used in the website

- ❖ HTML: the page general format is designed in HTML language.
- ❖ CSS: the style of the website page is made utilizing CSS language.
- ❖ PHP: PHP: the back end that control the front end logic is applied by PHP language.
- ❖ JavaScript: the animations is made by JavaScript language.
- ❖ WordPress: as a content management system and as a site builder operating under the General Public License (GPL) was built using PHP and the MySQL database system.
- ❖ MYSQL: database made and control by the MYSQL language.
- ❖ Apache: website will be keep running over the Apache server.
- ❖ AdobeDreamweavercc2016: website composition application that alter and view the website pages.

D. Creating Interface page

The main interface of the site is designed using HTML and CSS codes. The interface includes many pages that display information and images of the IIPS as well as information and pictures of the student in the primary and secondary school and information about the Iraqi Ministry of Education. All components of this interface are explained below:
Site header: consists of three parts: books picture, site name and logo of the (IIPS) as shown in Fig 3.



Fig 3. The website header

Main bar: consists of home link, link page primary study, link page intermediate study, link page preparatory study, link page academic study, link page contact us as shown in Fig 3.



Figure 4. The main bar

The vertical sidebar on the right consists of a list containing (5) pages, a page of the sections of the site containing all the pages of the site, a page of the Institute of Informatics for postgraduate studies leading to the Institute's site, and the page of the general directorates of education which contain the official links of these directorates, Iraq map, and the photo album page as shown in Fig.5

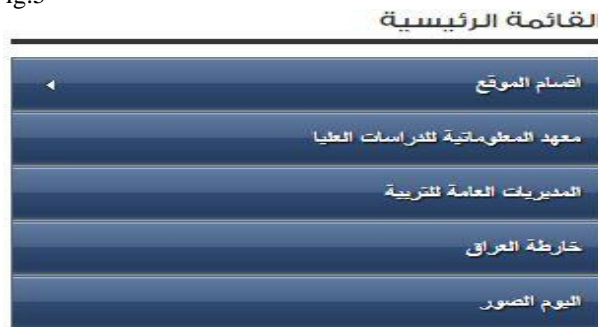


Figure 5. The vertical side bar

Website Footer: it is the last part of the website, consists of the copyright as shown in Fig.6



Fig.6. The Website Footer

E. Development of the page

After building all files of the website and linking the pages together, know it is becoming a web application, these pages have been tested on a personal computer. The webpage created using HTML, PHP, JavaScript and CSS.

1. Home Page: The home page gives a brief summary of the curriculum system and can be accessed through it to all other pages easily and clearly. The slideshow includes a collection of photos of the latest news that show the nature of the site.
2. Primary education page: A page that contains a list of all the classes of this stage where each class contains all its textbooks.
3. Middle education page: This page similar to the previous page, but they differ in content only which includes middle-level books.
4. Preparatory study page: This page contains a sub-list of the type of preparatory study (the fourth scientific, the biological branch and the application branch), and each of these branches contain the stages of its own, where each stage contains its own curriculum.
5. Academic study Page: This page contains a sub-list consisting of the Iraqi Commission for Computers and Information ICCI, to include the Informatics Institute for postgraduate Studies IIPS, which in turn is divided into three sections of the academic study (Higher Diploma which contains two sections are e-learning and computer science, Master and PhD). Each of these stages contains the subjects of the first course and the subjects of the second course.
6. Contact Us Page: The page includes the e-mail address and the Informatics Institute for Postgraduate Studies IIPS. This page contains a comment box so that the member of this website can send his comments (after typing his username and e-mail) to the website admin.

III. CONCLUSION

- The curriculum system is an interactive website that provides curriculum for all stages from primary to higher education. It supports interaction between students and e-learning. The main goal of the site is to provide all textbooks (for primary and secondary levels), as well as to provide lectures and resources in graduate studies.
- This project introduced for the category of websites known as interactive website. It showed how user can interact into the website.
- This Website designed by using many web programming languages that are HTML, PHP and CSS languages. HTML Hypertext Markup Language (HTML) is a language used to create web pages. And second language in this project is PHP, it is a free open source scripting language and is a server side language. And another language in my research is CSS. Cascading Style Sheets (CSS) is designed primarily to enable the separation of presentation and content, including aspects such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate CSS file, reduce complexity and repetition in the structural content.
- Anyone can browse the site, read and download books at any time, and allow registered members to add comments and suggestions.

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BIOGRAPHY



Ahmed Abed Maeedi , an Iraqi programmer, teacher of high school . Born in Wasit in 1983 and graduated from the University of Qadisiyah / College of Science at Computer Science Department at 2008 – 2009 , I worked as a staff member in Wasit Governorate Council (2010-2011) and teacher at Al-Bashaer Mixed School, and institute of Teacher Training (2012) . I have a computer training course, I have training course in Leadership Management in Qadisiyah, visual basic , ICDL of computer I have skill in Windows applications, HTML language, Visual Basic language, C ++ language, C language, Web design.In 2016 - 2017 I begin the study of a high diploma in E-Learning from Iraqi Commission for Computers and Information / Informatics Institute for Postgraduate Studies.