DESIGN AND MANAGE WEBSITE FOR COLLEGE OF ADMINISTRATION AND ECONOMICS DIYALA UNIVERSITY

MOHAMMED LAYTH TALAL

MARCH 2015

DESIGN AND MANAGE WEBSITE FOR COLLEGE OF ADMINISTRATION AND ECONOMICS DIYALA UNIVERSITY

A THESIS SUBMITED
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES OF
ÇANKAYA UNIVERSITY

BY
MOHAMMED LAYTH TALAL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE
IN
THE DEPARTMENT OF
MATHEMATICS AND COMPUTER SCIENCE
INFORMATION TECHNOLOGY PROGRAM

MARCH 2015

Title of Thesis: **Design and Manage Website for College of Administration and Economics, Diyala University.**

Submitted By **Mohammed Layth Talal**

Approval of the Graduate School of Natural And Applied Science, Çankaya University.

Prof. Dr. Taner ALTUNOK
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

Prof. Dr. Billur KAYMAKÇALAN
Head of Department

This is to certify that we have read this thesis and that in our opinion, it is fully adequate, in scope and quality, as a thesis of the degree Master of Science (M.Sc.) in Mathmatics and Computer Science – Information Technology Program.

Prof. Dr. Mahir NAKİP
Supervisor

Examination Date: 26.03.2015

Examining Committee Members:

Prof. Dr. Mahir NAKİP	(Çankaya University)	
Assist. Prof. Dr. Özgür Tolga PUSATLI	(Çankaya University)	
Assoc. Prof. Dr. Fahd JARAD	(THK University)	

STATEMENT OF NON PLAGIARISM PAGE

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name : Mohammed, Talal

Signature :

Date : 26.03.2015

ABSTRACT

DESIGN AND MANAGE WEBSITE FOR
COLLEGE OF ADMINISTRATION AND ECONOMICS
DIYALA UNIVERSITY

TALAL, Mohammed Layth Talal
M.Sc. Department of Mathematics and Computer Science
Information Technology Program
Supervisor: Prof. Dr. Mahir NAKİP

March 2015, 45 pages

With the fast development of information technology, websites have come to represent the main entrance for access to most institutions through fast communications and responses to various requests. Electronic communication achieved an actual scale to measure the efficiency of an institute especially with regard to the exchange of information and electronic services. In this study, the main purpose is to design and manage the new website of the College of Administration and Economics – Diyala University by using *ASP.Net 2010* and processing the existing problems on the old website of the college, such as the traditional design and management of the website contents as well as website usability and quality of services and activities that are available to students and staff. The website has been designed to diagnose and address the problems mentioned above. The tools are based

on designing and managing the website by using *Microsoft Visual Studio 2010,* and *ASP.Net,* which includes the C# language. Moreover, the *Microsoft Access 2010* was also used to build the database of some pages. Therefore, the objective of this work, which is to develop the website, has been accomplished properly. Finally, the administrator is provided with all necessary tools to manage website contents easily in addition to improvements in the usability of the website through navigation and accessing information easily and more flexibly.

Keywords: Website, Website Management, Usability, Website of College, Diyala University.

ÖZ

DİYALA ÜNİVERSİTESİ İŞLETME VE EKONOMİ FAKÜLTESİ İNTERNET SİTESİ TASARIMI VE YÖNETİMİ

TALAL, Mohammed Layth Talal
Yüksek Lisans, Matematik – Bilgisayar Anabilim Dalı
Bilgi Teknolojileri Bölümü
Tez Yöneticisi : Prof. Dr. Mahir NAKİP

Mart 2015, 45 sayfa

Bilgi teknolojisinin hızlı gelişimi ile, web-siteleri hızlı iletişim ve çeşitli taleplere hızlı cevap verebilme yolu ile çoğu kurumlara ulaşmanın ana yolunu temsil etmektedir.Elektronik iletişim, bilgi ve elektronik hizmetlerin takası ile ilgili olarak özellikle bir kurumun verimliliğini ölçmek için fiili bir ölçüm elde etmiştir. Bu çalışmadaki ana amaç, ASP Net 2010 programı kullanarak ve öğrenci ve çalışanın kullandığı hizmetlerin ve faaliyetlerin kalitesi ve web-sitesinin kullanılabilirliğinin yanı sıra, web sitesinin içeriklerinin yönetimi ve geleneksel tasarımı gibi okulun eski web-sitesinde mevcut olan problemlerinin üzerinde çalışarak Diyala Üniversitesi-Yönetim ve Ekonomi fakültesinin yeni web sitesini yönetmek ve tasarlamaktır. Web-sitesi yukarıda belirtilen problemleri belirlemek ve teşhis etmek için tasarlanmıştır. Bu araçlar, C# dilini içeren *Microsoft Visual Studio 2010, ASP.Net* kullanarak web-

sitesini tasarlamaya ve yönetmeye dayanmaktadır. Ayrıca, *Microsoft Access 2010* bazı sayfaların veri tabanlarını yaratmak için kullanılmıştır. Bu sebepten dolayı, web-sitesini geliştirmek amacı olan bu çalışma uygun bir şekilde tamamlanmıştır. Sonuç olarak, bilgiye daha kolay ve daha esnek ulaşma ve arama yoluyla web-sitesinin kullanabilirliğindeki gelişmelere ek olarak web-sitesinin içeriklerinin yönetilebilmesi için yöneticiye tüm gerekli araçlar verilmiştir.

Anahtar Kelimeler: Web-sitesi, Web-sitesi Yönetimi, Kullanılabilirlik, Diyala Üniversitesi, Fakültenin Web-Sitesi.

ACKNOWLEDGMENTS

In the beginning, I would like to thank my supervisor Prof. Dr. Mahir NAKİP for his continuous support, encouragement and advice in writing my thesis and also for the academic staff in the department of mathematics and computer science for their efforts throughout the study period.

I would like to dedicate this effort for my father and my mother for continuous supporting along the period of my study also I would like to dedicate this effort for my wife and my kids. I would like to thank all my friends who stood with me throughout the study period.

TABLE OF CONTENTS

STATEMENT OF NON PLAGIARISM iii
ABSTRACT iv
ÖZ vi
ACKNOWLEDGMENTS viii
TABLE OF CONTENTS ix
LIST OF FIGURES xii
LIST OF TABLES xiv
LIST OF ABBREVIATIONS xv

CHAPTERS:

1. INTRODUCTION 1
1.1. Scope of Study 2
1.2. Advantages and Challenges the Website of College 3
1.3. Problems of Study 3
1.4. The Purpose of Study 5
1.5. Importance of Study 5
1.6. Contribution to the Field 6
2. BACKGROUND AND LITERATURE REVIEW 7
2.1. Background 7
2.2. Literature Review 7
2.2.1. Literature review which have relation with website management 8
2.2.2. Literature review which have relation with usability of websites 11
2.2.3. Other studies 12
2.3. Discussion 13
3. METHODOLOGY 15
3.1. What are the Benefits of a Website 15
3.2. The Basic Elements of Building a Web site 16

3.3. Requirements Analysis for the Database of a Web site 16
3.4. Web site Management Model 17
3.4.1. Website development 17
3.4.2. Website maintenance 17
3.4.3. Website governance 18
3.4.4. Website infrastructure 18
3.5. Description and Structure Design the Website 18
3.6. Website Structure 19
3.6.1. Header 19
3.6.2. Body 19
3.6.3. Footer 20
3.7. Logical Structure Design of Web Interface 20
3.8. Web site Programming 21
3.8.1. What is ASP.Net 21
3.8.2. Cascading Style Sheets 22
3.8.3. Microsoft Access 2010 22
3.9. Database of Web site 22
3.10. Description and Structure Design of Database 22
3.11. Designing the Interface of Web site 25
3.12. Connecting the Interfaces of Website with Database 30
3.13. Website Protection 31
3.14. Results of the System Designed 31
3.14.1. Webmail service 32
3.14.2. Admin page 33
3.14.3. Page of control panel 33
3.14.4. Staff registration page 34
3.14.5. Student registration page 35
3.14.6. Departments 36
3.14.7. Students affairs 36
3.14.8. Contact us 37

3.15. The Vertical Template 37
3.15.1. Scientific researches page 37
3.15.2. Statistics page 38
3.15.3. Curriculum page 38
3.15.4. College location 39
3.15.5. Organizational structure 39
3.15.6. Iraq virtual science library 40
3.15.7. Arabic interface of website 40
3.15.8. Middle template 41
3.15.9. Follow us 42
4. CONCLUSION 43
4.1. Finding 43
4.2. Limitations 44
4.3. Future Studies 44
4.4. Conclusion 45
REFERENCES R1
APPENDICES A1
A. CURRICULUM VITAE A1

LIST OF FIGURES

FIGURES

Figure 1 Interface of old website of college 4
Figure 2 Header of website 19
Figure 3 Body of website 20
Figure 4 Footer of website 20
Figure 5 ER diagram 25
Figure 6 Opening Microsoft Visual Studio 2010 26
Figure 7 Create new website 26
Figure 8 Opening the main page of ASP.Net 27
Figure 9 Create webmail page 27
Figure 10 Opining page of webmail 28
Figure 11 Add New Item 28
Figure 12 Create table 29
Figure 13 Selecting name of field 29
Figure 14 Selecting properties of each field 30
Figure 15 Database connection 30
Figure 16 Linking database 31
Figure 17 Webmail service 32
Figure 18 Email page 33
Figure 19 Admin page 33
Figure 20 Page of control panel 34
Figure 21 Staff registration page 35
Figure 22 Student registration page 35
Figure 23 Economic department 36
Figure 24 Alumni Page 36
Figure 25 Contact us 37
Figure 26 Scientific researches page 37

FIGURES

Figure 27 Statistics about Faculty staff 38
Figure 28 Curriculum page 38
Figure 29 College Location 39
Figure 30 Organizational Structure. 40
Figure 31 Arabic interface 41
Figure 32 The middle template 41
Figure 33 Follow us 42

LIST OF TABLES

TABLES

Table 1 Staff Information 23
Table 2 Course Information 23
Table 3 Department Information 23
Table 4 Students Information 24
Table 5 Employee Information 24

LIST OF ABBREVIATIONS

ASP.Net	Active Server Page
CMS	Content Management System
CSS	Cascading Style Sheets
DBMS	Database Management System
HTML	Hyper Text Markup Language
HTTP	Hypertext Transfer Protocol
IS	Information System
JS	JavaScript
PDF	Portable Document Format
PHP	Personal Home Page
SQL	Structured Query Language
URL	Uniform Resource Locator
XHTML	Extensible Hypertext Markup Language
XML	Extensible Markup Language
WCMS	Website Content Management System
WMM	Website Management Model

CHAPTER 1

INTRODUCTION

With the fast development of the Internet and e-learning technology, the web site has already become the main carrier of fast information distribution and the exchange of information between institutions, companies and governments [1]. The rapid growth of the Internet especially provides extensive sharing of information. Moreover, web sites have become the main portal for entry into most institutions.

The establishment of web sites for administration and economics colleges arose from the increasing demand for the existence of academic sites representing the college to keep up with the rising pace in this field in the civilized world [2], in which networks and web sites are integrated into faculty administrations through rapid communications and responses to different requests which have become the actual scale for measuring efficiency of any institute in the world today. The scale of efficiency of a web site is dependent on its ability to satisfy the user's need for information, in addition to responding rapidly to users' requests while ensuring security and stability.

Currently most universities use web sites to provide students with interactive systems which accelerate communication for the growth of knowledge in any field of study. Students, with advanced computer training provided from home, are able to access systems from any part of the world and access any material using the Web [3].

This study will include design and managing new web sites for the College of Administration and Economics as well as improving the usability of web sites and providing activities and services to the end user.

1.1 Scope of Study

The University of Diyala is one of a number of Iraqi universities located in Diyala province in the east of Iraq about 60 kilometers from Baghdad. It was established in 1999 and comprises four colleges after which it expanded to become fourteen colleges in different fields and competencies. The study at University of Diyala includes three programs: namely Bachelor, Master and Doctorate [4]. The College of Administration and Economics – University of Diyala was established on 21 July 2009 and consists of two departments: Statistics and Economics. Both branches of the college receive secondary school graduates in scientific and literary fields. The College awards bachelor degrees in administration and economics.

The College of Administration and Economics is an academic institution which combines education and training so as to upgrade scientific research, leadership and behavior for students. Moreover, it takes into account the nature of reality and future prospects by ensuring high quality and academic support to help improve education at different stages of education.

The first web site of the College of Administration and Economics – University of Diyala was designed in 2010 where there exist many problems on the old web site of the College, such as the traditional design and the lack of activities and services, which users need. Finally, the old web site of the College appears visually not unlike a news channel due to the publishing a large number of news items, advertisements and photographs, all of which reduce the value of the web site.

A proposed system can be put forward as a solution relating to the web site design and the possibility of managing web site contents as well as improving the usability of a web site and providing activities and services for end users.

1.2 Advantages and Challenges of the proposed web site

The advantages

The educational purpose is to deliver activities and services to students and staff. Another advantage is to enhance communication with other institutions via the webmail service of the College the purpose of which is the exchange of formal papers between administrative units of the College with the administrative units of the University. Moreover, it promotes the role of the media unit of the College by covering activities and events that are related to the College or University.

The challenges

- This web site requires designers and developers with experience in designing and managing web site content.
- The new web site is not available online due to the high cost of hosting. This issue can be resolved through budget allocations by the Deanship of the College.
- The possibility of achieving user requirements such as quality of information and services where necessary.
- The speed at which web site contents are updated, which in turn depends on the quality of the Internet Service Provider and the quality of the server which hosts the web site.

1.3 Problems of Study

In this study, a diagnostic of the problems of the old web site of the College of Administration and Economics – University of Diyala was conducted and it was found that the majority of the problems lie in the design and management of the content of the web site. The interface of the web site and its pages is not available in the English language, and this represents the greatest challenge facing web site users, especially foreigners. Moreover, the email services of the web site are inactive. The e-mail service represents the point of communication between the college and the university in addition to being a communication service between students and staff of the College. Almost every site page is empty; these pages do not contain the

databases and information that users need. Such pages include pages of the scientific department, the research department and the alumni students department, all of which contain no database. The final problems include the difficulty of usability and quality of information and services that are required by users. When browsing a current web site of the College, it appears to be not unlike a web site of a news channel or electronic magazine, due in no small part to the overabundance of news and pictures as well as the traditional design of the interface, which does not represent an academic site as shown in Figure 1

Figure 1: Interface of old web site of College

1.4 The Purpose of the Study

The aim of this study is to design and management a new web site for the College of Administration and Economics – Diyala University using *Microsoft Visual Studio 2010 Ultimate* and *ASP "Active Server pages"* which has many tools to help the designer to design and manage web content easily and more flexibly. The goals are the processing of the existing problems of the old web site of the College and improving management of web site content as well as enhancing the communication between students and staff through creating accounts for each of them in order to deliver information to students, such as lectures, courses schedules and results of exams. Improving electronic education has become unavoidable in modern research and developing education has also improved the usability of the web site thereby enabling users to browse pages of the web site without difficulty or complexity.
Finally, the role of the media unit is activated so as to publish issues and activities of the university and cover all scientific conferences which are held by the College or University.

1.5 Importance of Study

The main entrance to any university or college is through its web site, which represents a communication point between that university and the outside world. The web site is expected to provide services to people, especially to students and researchers. The importance of the study can be summarized as follows:

- The educational purpose through delivering activities and services to students, researchers and academics;
- Insurance of communication between colleges and other institutions via the e-mail service of the web site, especially operations of sending and receiving formal papers.
- Activating the role of the media unit by publishing the issues and activities relating to the University and covering scientific conferences that are held by the College or University.
- Access to advanced centers in the classification of web sites through the creation of an integrated web site that meets the requirements pertaining to the educational process.

- Creating special accounts for the College in social media networks, such as *Facebook*, *Twitter* and *Google Plus* and publishing the activities and events of the college by placing links of web sites onto social media sites.

1.6 Contribution to the Field

This study will include designing and managing the web site for the College of Administration and Economics – University of Diyala by using specialized software such as *Visual Studio 2010* and *ASP.Net* to deal with databases through insertion, updating and retrieval of data. *ASP.Net* is used to design and manage web sites so as to enable users to control site contents in addition to activating webmail services. The purpose of webmail is the exchange of information and formal papers between college units and other institutions as well as creating new accounts for each staff member to maintain contact with students. Additionally, one can create an account for the College web site on social media sites such as *Facebook*, *Twitter* and *Google Plus* and publishing all activities and events that occur at the College by placing the link of the College web site onto social networking sites. The evaluation of the web site is dependent on the quality of the information and services that are offered to users, especially students and staff.

The questions arising from the aim of the study are as follows:

- How does one design the web site of the College?
- How does one manage the web content?
- How does one provide web sites in more than one language?
- How does one achieve usability?
- How does one advantageously utilize the e-mail service of the web site?
- How does one publish news, advertisements and activities of the College?

CHAPTER 2

BACKGROUND AND LITERATURE REVIEW

2.1 Background

Website Management Model is a framework for organizing the activities such as usability, accessibility, publishing and security of site administration. Therefore, it identifies the people, processes, technology and other resources you need to support a website [5].

The Website Content Management System "WCMS" is a foundational website application platform for website design and information distribution also is an auxiliary tool system for website development [6]. It enables the programmer to rapidly develop, maintain and manage the high performance dynamic website [7]. This study includes possibility design and manage website contents by using software ASP.Net that is part of "Microsoft Visual Studio 2010 environment.

ASP.Net is a web application framework developed by Microsoft where allow programmers to build dynamic page and static page of websites as well as allows to use a full featured programming language such as C# to build web applications easily [8] where contain several tools that enable programmer to design and manage the website contents easily and more flexible.

The database of website will design by using ASP.Net as well as Microsoft access 2010 where enables user to design and manage database of website.

2.2 Literature Review

A literature review is collected and read all the relevant studies with title of thesis where review should describe, evaluate summaries and explain this literature in addition to give a theoretical base for the thesis.

In this part, the attention will be on the scientific references that specialized in management and development the websites of universities or institutes as well as the usability of website and possibility of accessing to site pages. There are many studies

in this fields some of these studies are for universities and the other studies for institutions. The following is a summary of each study in terms of its goals, importance and the conclusions reached by.

2.2.1 Literature review which have relation with website management

There are many studies specialist in the websites management especially the educational websites. In this part it can know methodology to website management through what come in the literature review [9], [10], [11], [12], [14] and [15].

The main objective of study [19] is possibility of finding solutions for processing the defects and limitation of traditional website management, as well as using specialist software in the design and mange websites contents such as Microsoft Visual Studio ASP.Net, PHP and Microsoft SQL Server. Moreover, the mode of website management is the inevitable trend in universities website construction and management. It is the effective way to promote the website management level.

Conclusions of this study are focused on the website group management model that includes new generation and independent work in the management and development website of university. In addition to implemented project of website group platform that processed most of administrative problems through classifies the administrator into system administrator and secondary administrator where distribution the tasks for each administrator. The system administrator represented on the top level of the administrators where oversees the conduct of operations and the distribution of tasks. The second type of administrator called “sub website administrators” responsible on the update, edit and delete the website contents.

The aim of study [10] is improve website management by using web content management system, this system includes three layers are: frontend layer, backend layer and graphical layer. Frontend layer manages the web through structure and presents the content that interacts with the end user. The backend layer manages content of web by database management system “DBMS” through deploying and storage content.

The last layer related with visual design and information strategy. On the other hand the software platform use for building websites and web applications, also create and represent different pages dependent on user requirement.

Conclusions of this study are lies in the easily of manage the website contents through distribution administrative tasks to more team under the supervision web content management system. However, the web content management platform should be selected based on flexibility in terms of content delivery, content updates and custom functionality. The approach of web content management system enables the user to get access to information in a flexible way through a graphical user interface an easy to use.

The aim of study [11] is achieving the requirements of users through a flexible system configuration as well as the operation of building a specific site should be characterized by the rapidity and easily of setting where the quality of the information needed by the user. Beside that support the website of essential software that help to open most types of files, such as PDF and adobe flash player that client does not require installing extra program, making the system management and use is very convenient. Finally focused on flexibility and usability in navigate the pages of website.

Conclusion of the study the main idea of content management system CMS is the separation of content management and design. Page design is stored in the template where the content is stored in a database. Protect system data from unauthorized access through supporting website secure system to be more safety. Page rank algorithm mean if a page is referenced in many other web pages, this page is likely to be important page; a page has not been repeated despite the reference, but was an important reference page.

The aim of study [12] is designing and implementing website by students group of university using “Wikis” is a web site that allows for collaboration from a group of users who can edit, add, remove, and change the content of web pages within the site through creating small website for example website of school, student club, company, the website include at least eight web pages using a consistent navigation scheme.

It can conclude from this study that using sites that specialized in building and designing websites, such as “Wikis” which considered useful for training the student to design and manage traditional website but, unable to design big website.
To sum up there are many of educational sites specialist in the designing and management the website where considered useful for beginners’ designers that using to construction the small sites, but does not provide all tools to building integral sites.

The aim of study [14] WCMS enable programmer to manage the pages of websites easily. Beside that WCMS that considered one of the most popular content management systems. Its flexible architecture and scalability can best meet the needs of the webmaster.

Conclusion of the study that WCMS has enjoyed a very good reputation for its safety, stability and usability as well as the WCMS represented basic tool of construction the website for governments, enterprises, media and education. It provides a common solution for all levels of webmasters.

In the study [15] the WCMS software provides authoring tools designed to allow users with little knowledge of programming to design, create and manage web content easily. The non-technical staff in certain restrictions of rules, workflow to create and processes manages, edit, and control a large, dynamic collection of web content such as HTML documents, video, audio, and images.
Conclusion of the study WCMS adopt three layers technical architecture to manage and design the system of website, which consist of presentation layer, persistence layer and business logic layer.
Presentation layer can provide model data and is responsible for providing the user interface to interact with the applications.
Persistence layer offers possibility for data update and retrieval, transaction management, database connection pooling, programmatic also declarative queries, and declarative entity relationship management.
The last layer is business logic layer or services this layer allowing interfaces for interaction with other layers, managing dependencies among business level objects, adding flexibility between the presentation layer and the persistence layer.

2.2.2 Literature review which have relation with usability of websites

There are many studies related with website usability especially the educational websites. In this part it can know methodology to website usability through what come in the literature review [13], [16], [17]

The aim of study [13] is demonstrates the usability of website and easily of navigation website pages through simple user interface. The evaluation websites of University in Jordan has dependent on the usability of educational websites through categorized into three parts. The first one is employed in identifying usability problems are evaluator-based methods, user-based, the last one is tool-based method. Moreover, the usability represents the range to which a website can be used by specified users to achieve specified objectives with efficiency, effectiveness, and satisfaction in a specified context of use.

It can inferences study that evaluation the usability of university websites and to discover the weak and strong design. In addition to investigate usability of educational websites from the viewpoint of students, and ask them to report qualitatively what they disliked and liked concerning the design of the tested websites. Finally, the usability dependent on the several basic elements such as, navigation, accessibility, designing, architecture and contents of website.

In the study [16] this study defines the usability of websites by making survey that includes 41 questions were carved out. These questions had been collected under 6 factors; learnability, controllability, helping, appearance, effectiveness and satisfaction. On the other hand the learning level dependent on the number of student whose use the website and how well the student website interaction occurs.

Conclusion of this study includes distance education websites is beneficial to the students learning efforts if achieved the usability concepts. The purpose of this study lies in analyze type of relationship occurred between students' perception of distance education in relation to age and gender, as well as determine the usability level of a website. The results of this study dependent on the demographic characteristics of the students participating in the study by making statistics included participants by gender, age, department and geographic region of living

The purpose of the study [17] is identifying the usability issues and the effect of the email system then evaluates the language used as well as puts forward some website suggestions. However, usability refers to the ease with which visitors are able to use a website where the goals of most visitors are to find out enough information they need.

It can conclude from this study that most of website usability dependent on providing the following basic elements:

- Designing the interface and pages should be harmonic especially choosing the colors, font size, font type and coordination between the site contents.
- Languages available : Language and expression are very important for the users to understand the context of the website
- Navigation the website pages and possibility of accessing to information easily.
- Email system is used as a communication and interactive tool by a website.

2.2.3 Other studies

There are other studies [18] and [19] about quality of websites also websites designing. The objective of study [18] is evaluating website quality dependent on the model of evaluation process this model focus on the activities to be completed to evaluate the quality. However, website quality dependent on possibility of achieving the usability and accessibility of website contents. The website should be satisfied the end-users as well as website quality dependent on the services quality and quantity of information which interact with end user.

It can conclude from this study that focused on the problem of introducing a framework to give a conceptual basis for a website quality evaluation process. On the other hand diagnostic the problems of website evaluation quality by using an approach based on a model for quality of services as well as, determine and analyses the quality gaps and provide appropriate solutions.

The aim of study [19] User-based design is a relatively original idea for website design whose final aim is to design user-friendly interfaces which are easy and convenient for most kinds of users to operate. The perfect design dependent on an achieving the following conditions: usability, quality of contents and possibility of accessing to information. In addition to choosing the colors, font size, font type and

coordination between the site contents.

It can inferences from this study during the development phases, the researchers have applied the user based design concept with the collection and analysis of information, also provide services and activities for user. The Language and expression are very important for the users to understand the context of the website and to helpful for foreign students where most of academic sites have more than language beside native language.

2.3 Discussion

After analysis the previous studies and look at the experiences and the details of the techniques used in management and development websites where accessing to the following conclusions.

it can be agree with [9], [10] and [11] about adopting a specific solutions for problems of traditional management by using WCMS which simplify operations and actions for content management, as well as, its strong extendibility, flexible architecture, and scalability can best meet the needs of the webmaster.

The study [12] is useful for training the student to design and manage traditional website but, this site "Wikis" unable to design big sites because of does not provide all tools to building big sites.

In sources [14] and [15] it is normal to agree with them especially in the method of distribution the administration tasks as well as adopt modern technical to manage and design the system of website also separation between site contents and possibility of accessing to pages easily. It provides a common solution for all levels of webmasters.

In sources [13] and [16] both of them focused on the usability which consider a very important for website evaluation where dependent on the quality and quantity of information which user need it. The study [13] dependent a comparison between nine sites of universities where the evaluation of these sites was on the basis of usability

In [16] dependent on the survey which was includes set of questions for evaluation the websites as well as distance education websites created with respect to the usability concepts will be beneficial to the students learning.

In sources [18] and [19] both of them focused on the designing and quality of information which using to building educational sites as well as diagnostic and analyses the quality gaps and provide appropriate solutions. These studies can be useful for evaluation the educational sites.
The study [17] considered the best of all previous studies because it covered most of concepts which helping in the management and development the educational sites as well as focused on the factors which lead to build integrated educational site.

From all of the above, it is considered ideal in solving the problems facing the process of website management of college it can be said that website building and the analysis of the study problem by using appropriate tools and the components Hardware and Software to access the required aims in management and development the website of College. However, there are some constrains that may face the website construction for example, technical, financial and human obstacles by training courses for the admins about website management, these constraints can be overcome and achieving academic site.

CHAPTER 3

METHODOLOGY

In this study, we will design a new web site application for the College of Administration and Economics – Diyala University and build pages for the web site. This operation includes three steps. The first step is designing the site interface using *Microsoft Visual Studio 2010* and *ASP.Net*. The second step is building the site pages which include static pages and dynamic pages.

These pages will be built using two programming languages, the first of which being *ASP.Net,* which is considered to be the most popular language and most powerful way to develop interactive web applications as well as the most flexible tool for building interactive web sites where programmatic logics. In this layer, C# programming language codes are used. *ASP.Net* is part of the *Microsoft Visual Studio* environment, which contains a code editor, a compiler to detect errors and a designer to build web sites [20].

The second language, *Hypertext Markup Language (HTML),* is the language of computer coding used to convert ordinary text into active text for display and use on the Web [21].

The last step is building a database of some pages of web sites by using *Microsoft Access 2010,* which enables the user to design and manage databases easily and more flexibly.

3.1 What are the Benefits of a Web site?

Most people visit a web site for three basic reasons:

- To access information needed by a user;
- For educational, recreational or commercial purposes; and
- For communication and exchange of information.

3.2 The Basic Elements of Building a Web site

- **Hardware:** This element includes all devices and tools, such as computers, printers, scanners, cameras, routers, servers, which help to design and implement web sites. Hardware can range from a single personal computer to a single computer in a group of computers or a set off computers.
- **Software:** includes the types of software, such as *ASP.Net*, *PHP*, *HTML*, *CSS*, *Java Script*, *SQL Server*, used in the design and management of web sites. This software has integrated tools to design static pages and dynamics pages in addition to tools to build databases for the storage of information.
- **People:** This part encompasses the set of designers, developers, administrators and end users who work together to manage and develop the contents of the web site, in addition to testing and updating the site on a daily basis. The web site developers are expected to communicate with end-users and understand their requirements.
- **Information:** this element is the most important in web site creation because the value of the web is dependent on the quality and quantity of information and the value of the database through interactions with end-users also providing the site with all information that users need. The database of the web enables the user to access information flexibly through an easy-to-use graphical user interface.
- **Procedures:** This component refers to the rules and instructions which manage and design the web site. The administrators who run the database need to document any procedures on how to store and retrieve data and information.

3.3 Requirements Analysis for the Database of a Web site

This is determined according to the actual needs of the College. The important issue in building a database of the web site is in meeting the needs of the college and the end-user. However, we can analyse the construction of a web site through what came in previous studies which were mentioned in Chapter 2. These studies depended on designing and managing web site contents. Firstly, this entailed designing the interface of the web site and building the pages according to web site requirements. Secondly, controlling the web contents by was carried out by using a content

management system, such as updates of the site, adding new pages or removing pages. Finally, a database for a web site includes the essential information that meets user needs.

3.4 Web Site Management Model

Web Site Management Model "WMM" is a framework for the regulation of all the contents and activities of site administration. That is, it identifies the users, processes, technologies and other resources needed to support and develop the web site. [6]

A set of management tasks includes:

• Web site Development
• Web site Maintenance
• Web site Infrastructure
• Web site Governance

To introduce the model, we will begin with a brief overview of the elements from which it is composed. These elements represent the basic structure to construct an integrated web site.

3.4.1 Web site development

This part encompasses the set of designers, programmers and technicians who are responsible for adding, modifying and removing the contents of the web site, in addition to testing and updating the site on a daily basis [6].

Web site developers are expected to communicate with end-users and understand their needs.

3.4.2 Web site maintenance

This part consists of a set of engineers, technicians and specialists in processing any technical problems in addition to testing the software and improving web site performance in order to ensure the operational integrity of a site [6]. The committee of maintenance is responsible for fixing all technical problems such as service quality and speed of response in addition to repairing devices, conductors and other parts of the system.

3.4.3 Web site governance

This element is one of the most crucial for the construction of any web site where the presiding elements of maintenance and development as well as controlling and monitoring of all activities and events through supervising on the workflow operations is considered to be important [6]. The objective of Web site governance is to ensure a controlled approach to site management – from planning and design through to maintenance and infrastructure.

3.4.4 Web site infrastructure

To construct any web site, there must be available infrastructure including all tools and requirements, such as hardware, software and laboratories [6]. Web site infrastructure embraces all activities, resources and staff skills and experience, all of which lead to creating an integrated web site. Without infrastructure, it is impossible to produce a perfect web site as a response for all user requirements.

3.5 Description and Structure Design the Web site

Before starting to design a site interface, the basic tools and software should be included:

- *ASP.NET,* an open source server-side Web application framework designed for Web development to produce dynamic Web pages. It was developed by Microsoft to allow programmers to design and build dynamic web sites, web applications and web services. [20]
- *Cascading Style Sheets* (CSS), a style sheet language used for describing the look and formatting a document written in a markup language while most often used to change the style of web pages and user interfaces written in HTML and XHTML [21] to help designers to build and design web site interfaces.
- *Microsoft Access 2010* to build the database of a web site.

3.6 Web site Structure

3.6.1 Headers

The header can be likened to miniature versions of the main page that sit atop each page and do many of the things that home pages do, but in a limited space. Headers provide site identity and global navigation, with search, logo and other tools according to the type of web site. The web site header of the College should consist of the following fields (as shown in figure 2):

- Name of College and University;
- Logo of the College;
- Language button;
- Search button;
- Webmail button.

Figure 2 Header of website

3.6.2 Body

These areas include horizontal templates, fields, photos, ads and a set of links which interact with the end-user.

The web site body should contain the following fields:

- Horizontal templates including *Home page*, *Diyala University*, *Departments*, *Administrative Units*, *Student Affairs*, and *Contact Us*.
- Vertical templates, including *About the College*, *Deanship*, *Departments*, *Library*, *Research*, *Alumni*, *Statistics*, *Logo of College*, and *Scientific Activities*.
- Animation or dynamic pages that include all advertising related to the College and University and a set of rapid news at the bottom the moving pictures, as

shown in Figure 3.

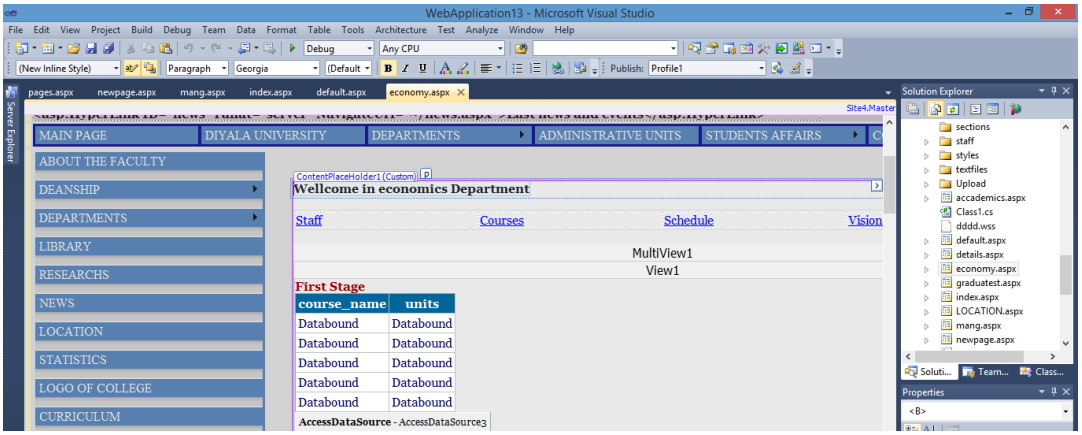

Figure 3 Body of website

3.6.3 Footer:

The footer is the lower area of the web site which always consists of any housekeeping and legal matters, such as copyright statements, links to social media sites, email, as shown in Figure 4.

Figure 4 Footer of website

3.7 Logical Structure Design of Web Interface

In this study, we will be designing the web interface and building pages using *ASP.Net*, which is part of the *Microsoft Visual Studio 2010* environment, by segmenting the main page into three regions: *Header*, *Body* and *Footer*, each of which contain a set of codes behind the page design according to the type of content existing in the main interface. When designing a web site, the following elements should be emphasized:

- Colors, which should be coordinated, especially on the home page;
- Size and type of font;
- Navigation pages of the web;
- Accessibility;
- Coordination between content of the web; and
- Dimensions of site interface and pages.

3.8 Web Site Programming

The operation of designing and building any web site requires a high level programming language such as *ASP.Net*, the content of which contains basic tools that enable users to create static and dynamic pages with flexible control in page properties. After designing the main page and building it, databases should be provided for most pages by using *Microsoft SQL Server* or *Microsoft Access 2010*.

3.8.1 What is ASP.Net?

ASP.Net is a web application framework developed by Microsoft to build dynamic data-driven web applications and services. *ASP.Net* is considered to be the most popular and most powerful way to develop interactive Web Applications and is also the most flexible tool for building interactive web sites. Programmatic logics and algorithms are used with the .cs file extension. In this layer, C# programming language codes are used [20].

Why ASP.Net?

- It allows users to design and manage web sites by providing all necessary tools.
- It enables users to control and manage web content easily.
- It is a powerful and flexible tool for building interactive web sites.
- It enables users to change the contents of sites easily and rapidly.
- It enables users to build web applications or windows applications.

3.8.2 Cascading Style Sheets

Cascading Style Sheets CSS is a style sheet language used to describe the look and format of a document written in a markup language. While most often used to change the style of web pages, the user interfaces are written in HTML and XHTML [21]. This is a very powerful, flexible and easy language to use. However, CSS is designed primarily to enable the separation of document contents from document presentation, and includes such elements as layout, colors and fonts. This separation can improve content accessibility and provide more flexibility.

3.8.3 Microsoft Access 2010

Microsoft Access is a database management system from Microsoft that combines the relational *Microsoft Jet Database Engine* with a graphical user interface and software-development tools. *Microsoft Access* is perfectly suitable for work requirements [22].

Microsoft Access enables users to design and manage databases easily and more flexibly in addition to editing, adding, deleting and reporting on all contents of a database.

3.9 Database of Website

When designing the main page of a web site, a database should be built which includes information needed by users**.** *ASP.Net* has many tools which enable designers and administrators to design web pages and build databases for each page according to page requirements as well as using Microsoft Access 2010 to building some pages of website.

3.10 Description and Structure Design of Database

In this study, we will use *Microsoft Access 2010* to create some tables relating to department, staff, students, courses and employee. In the following tables show the logical construction of the data in the main tables, The staff information table is describe in Table 1, the courses information table is describe in Table 2, the

department information table is describe in Table 3, The student information table is describe in Table 4, The employee information table is describe in table 5, as shown in the following tables.

ID	First_Name	Last_Name	sex	Title_job	Address	Email
100	Ahmed	Sultan	Male	Lecturer	Irqa - Diyala - Baqubah	Ahmed_sultan@eco.edu.iq
101	Hasan	Salim	Male	Lecturer	Irqa - Diyala - Buhrez	Hasan_Salim@eco.edu.iq
102	Jenan	Sayd	Female	Employee	Irqa - Baghdad - shaab	Jenan_Sayd@eco.edu.iq
103	Ali	khaled	Male	Employee	Iraq - Karkuk - yangeja	Ali_khaled@eco.edu.iq

Table 1 Staff Information

ID	Name	Number	Stage	Department
422	Calculus	120	First	Statistics
424	Computer applic	122	First	Statistics
522	Accounting	233	Second	Economic
528	Advance Mathem	230	Second	Economic

Table 2 Course Information

Name	Number	Manager_Name	Location	Email
Economic	624	Nadiya Mahdi		economic@eco.edu.iq
Statistics	625	Ahmed Sultan		statistic@eco.edu.iq

Table 3 Department Information

ID	First_Name	Last_Name	sex	Adress	Email	Birth_date
200	Ahmed	Sami	Mail	Diyala - Baqubah	Ahmed_sami@eco.edu.iq	4/9/1988
201	Marwa	Ahmed	Femail	Diyala - Baqubah	Marwa_Ahmed@eco.edu	8/20/1989
202	Sara	Ali	Female	Baghdad - Zayuna	Sara_Ali@eco.edu.iq	7/4/1986
203	Omar	Salah	Male	Diyala - Himreen	Omar_salah@econ.edu.iq	6/20/1987

Table 4 Students Information

First_Name	Last_Name	Number	Title_job	Email
Ali	Salim	866	Assistant manager	Ali_salim@eco.edu.iq
Sara	Ahmed	868	writer	Sara_ahmed@eco.edu.iq

Table 5 Employee Information

The college of administration and economic have a two departments each department is described by name, number, manager and email as well as each department has a set of lecturers where each lecturer has a name, number and email also the department responsible to offers courses where each course has a name, number and level which deliver for students by lecturer where each student has an information include name, number, sex, address, email also the department responsible on the employs the employees where each employee has a name, number, title job and email the following figure (5) shows the ER Diagram of the entities and their relationships.

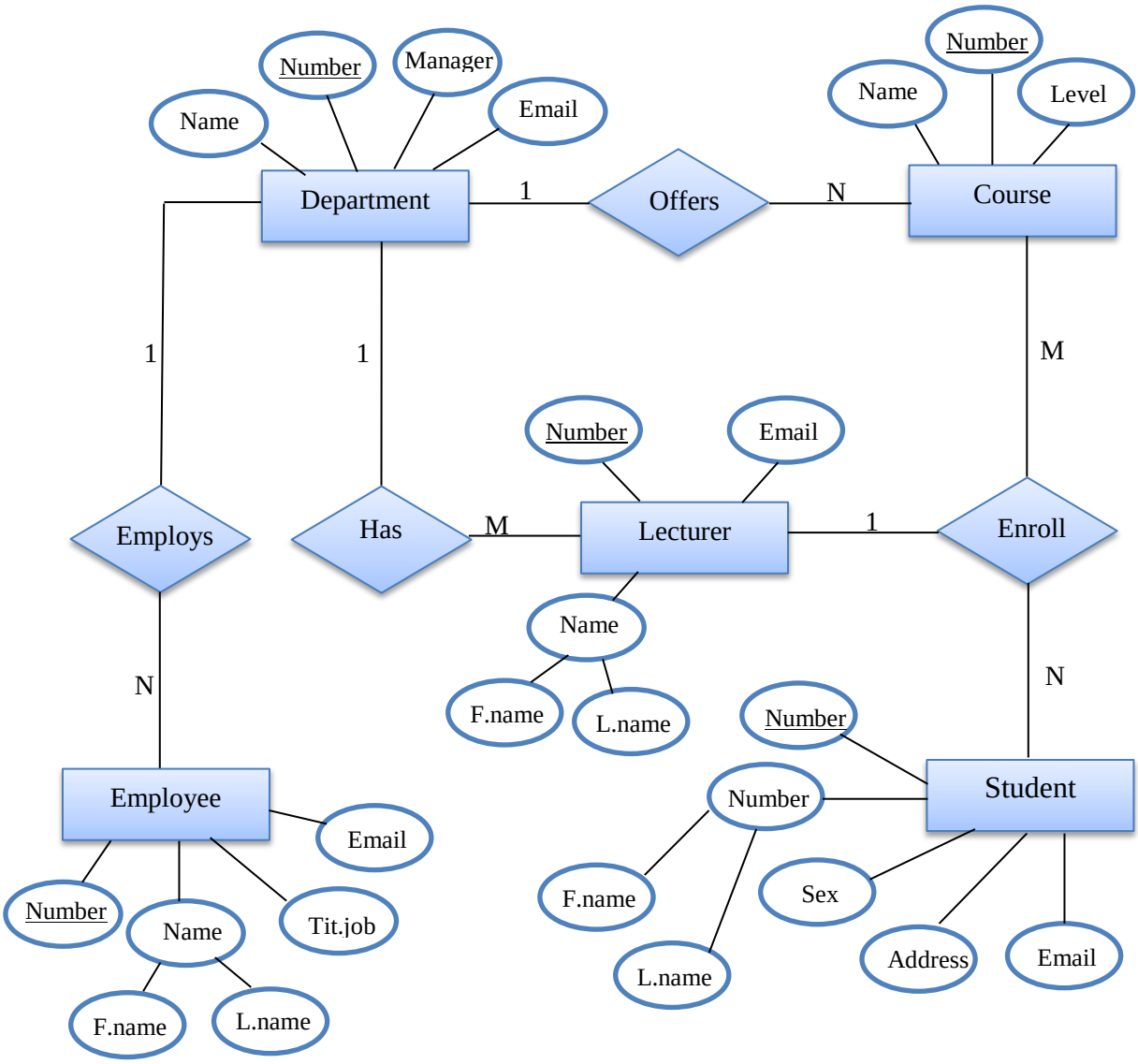

Figure 5 ER Diagram

3.11 Designing the Interface of Website

Prior to beginning the design of a web site, we should take advantage of previous studies relating to the design and management of web sites, such as the study [18] which focused on the basic elements in web site design, including web site languages, navigation and email services.

- The first step is to open *Microsoft Visual Studio 2010, ASP.Net* and to select "New Project" as shown in Figure 6.

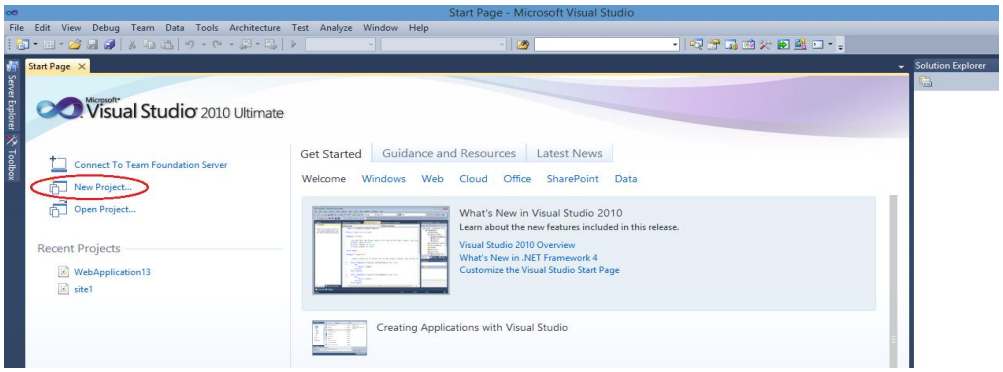

Figure 6 Opining Microsoft Visual Studio

- From the installed templates, select "Visual C#" and select web. In the middle list, select "Net Framework4" and select *ASP.Net Web Application*. Finally, we write the name of the web in the name field to create a new web site. Pressing "OK" completes the process. Figure 7

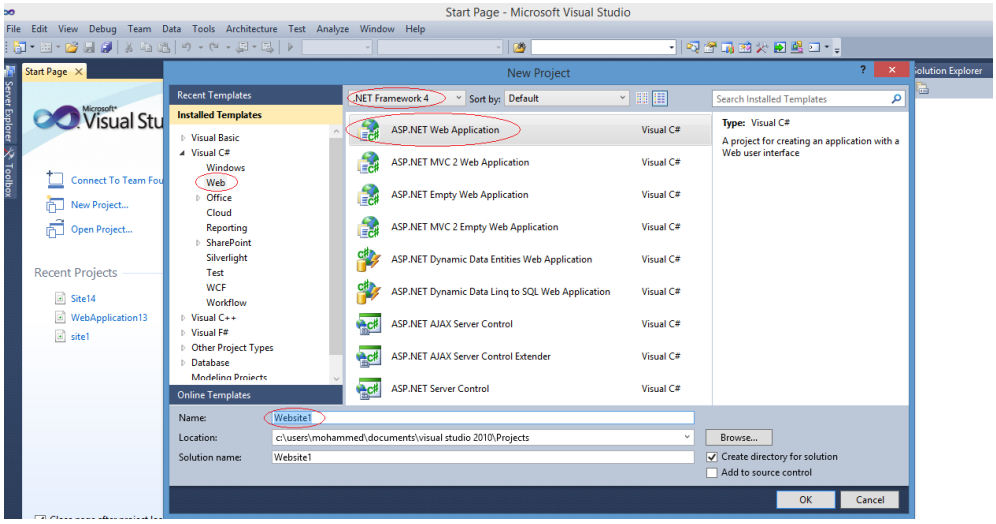

Figure 7 Create new website

- After selecting the program language and name of the web site, it will open the main page of *ASP.Net*, which contains three basic elements: *Tools*, *Properties* and *Solution Explorer,* which help the user to design and build static and dynamic pages, as shown in Figure 8.

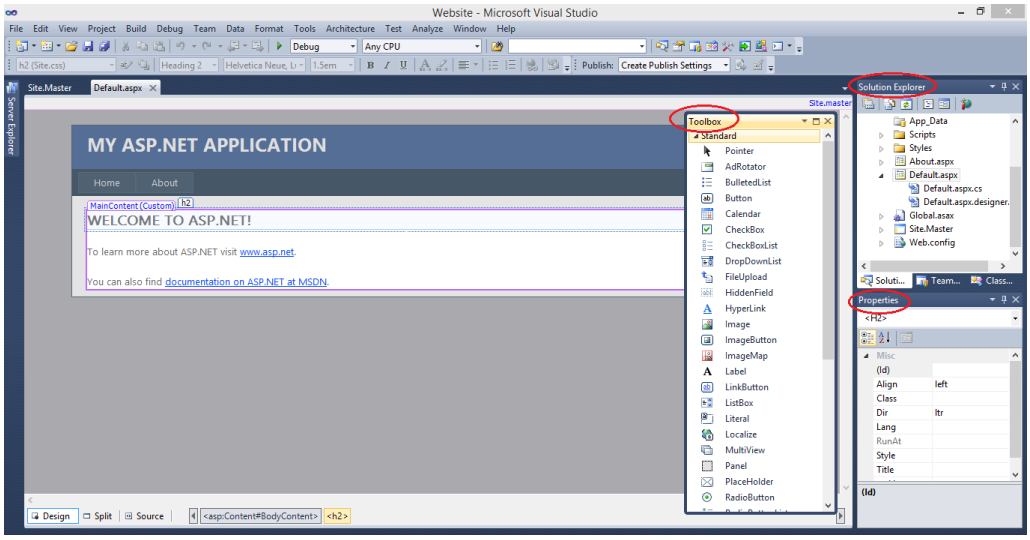

Figure 8 Opining the main page of ASP.Net

- Create webmail page

After opining the main page of *Visual Studio* and selecting *ASP.Net,* a web application will begin to build the first page by going to “File” and selecting “New” then selecting “Web Site…”, as shown in Figure 9.

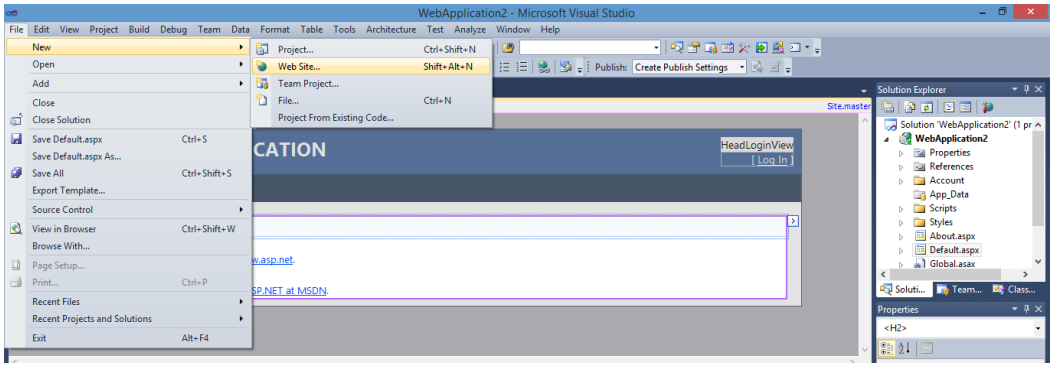

Figure 9 Create webmail page

- After selecting “New” then “New Web Site” will appear. From the “Installed Templates” list select “Visual C#” then select *“ASP.Net”*, and press “OK.” This will open the webmail page. Here, we select the login page, then right click selecting “Add New Item” as shown in Figures 10 and 11.

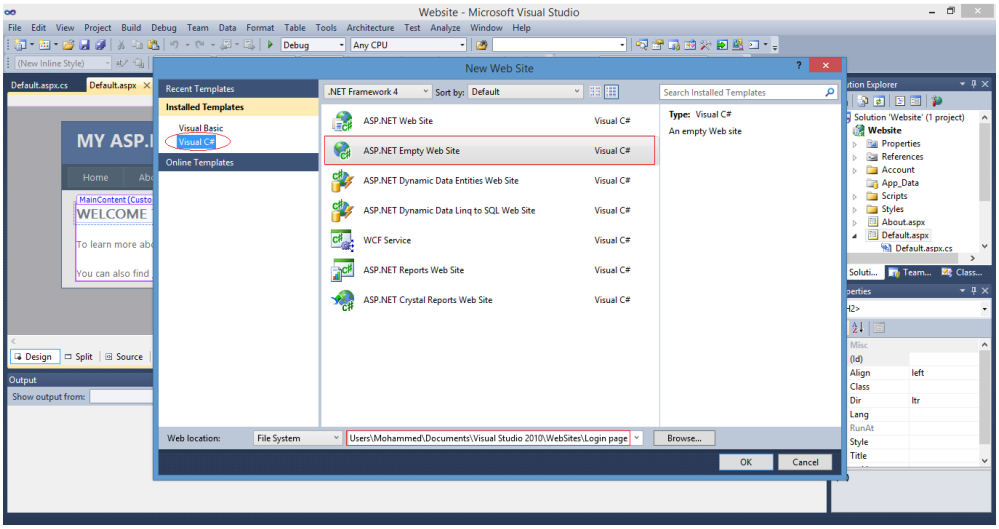

Figure 10 Opining page of webmail

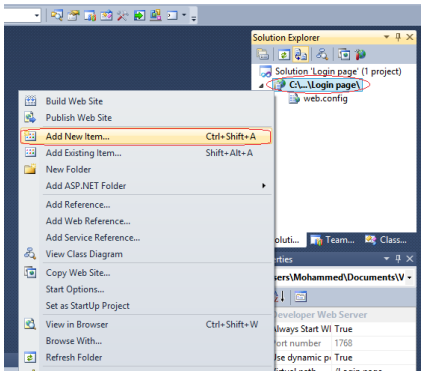

Figure 11 Add New Item

- After selecting “Add New Item,” a list will appear. We select “Visual C#” then web form and determine the name of the page. Then we press “Add,” after which we create a table that includes seven rows and three columns as shown in Figure 12.

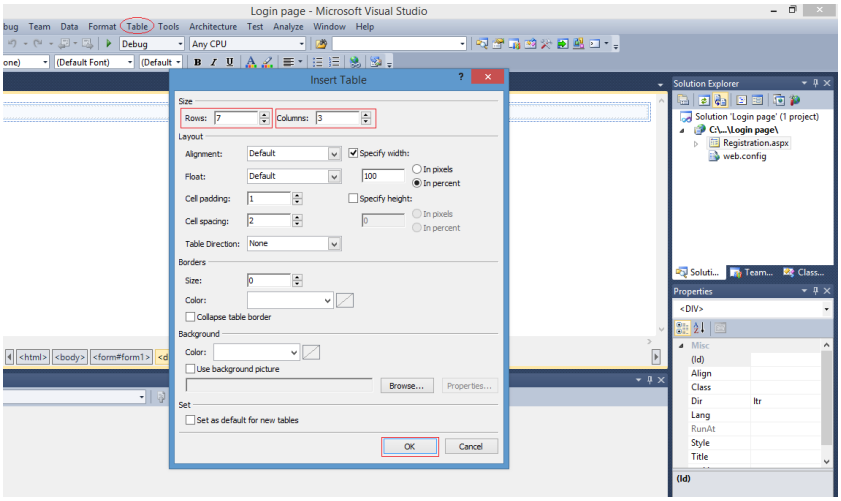

Figure 12 Create table

- The table contains a set of fields: *User Name, E-mail, Password, Confirm password, Department, Gender, Address, Photo, Login* This table determines the properties of each field, as shown in Figures 13 and 14.

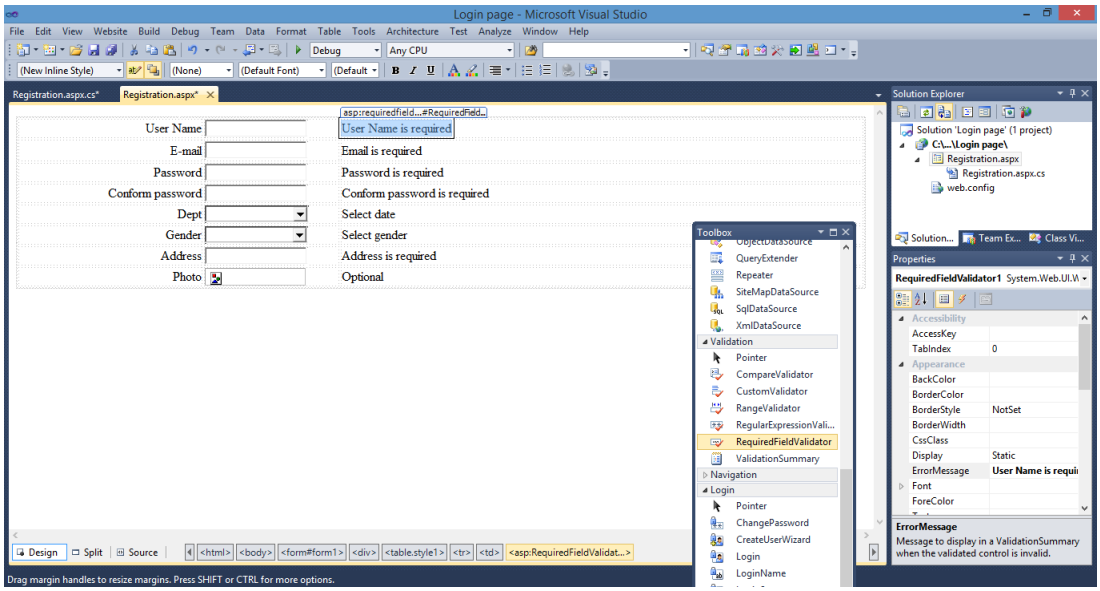

Figure 13 Selecting names of fields

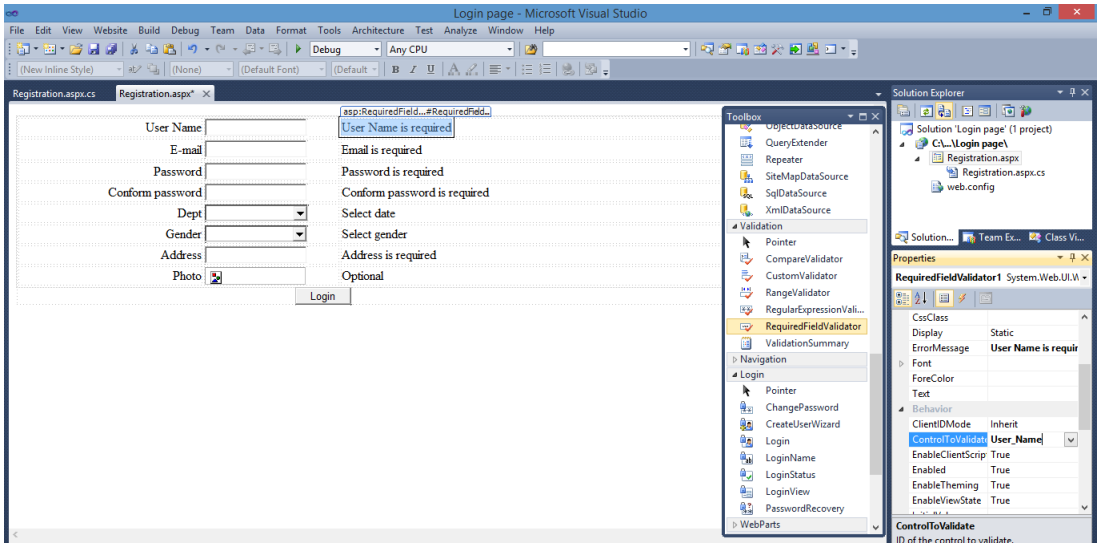

Figure 14 Selecting properties of each field

3.12 Connecting the Interfaces of Web site with Database

Most pages of the web site containing the database include information according to the type of page due to the fact that the database was designed using *Microsoft Access 2010*. When linking a specific page with the database, we should follow the following steps: After opening Microsoft visual studio and open a particular page, followed by clicking "Tools" on the menu bar. From here, we select "Connect to Database," After that, from "Data sources" we select the *Microsoft Access* database file and press "*Continue,"* which will open a new form with several fields, the first of which is "Data source." The second field is "Database file name." This field can determine the type of file that is contained in the database and then links with page. Finally we press "Ok." as shown in Figures 15 and 16

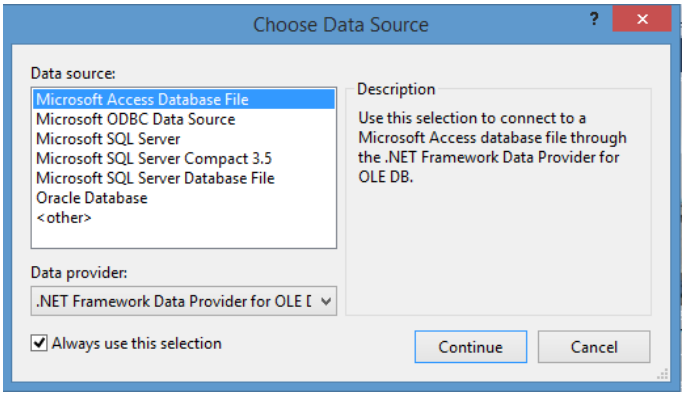

Figure 15 Database connection

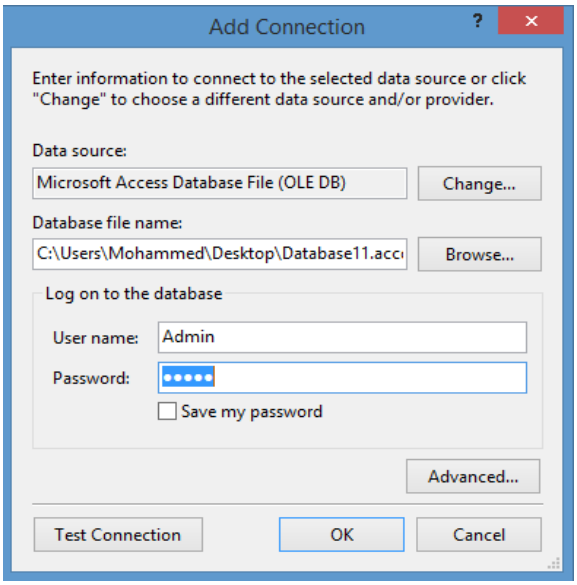

Figure 16 Linking database

3.13 Website Protection

Web site security is a very important issue due to the Web being widely used in public life. Moreover, it suffers from attacks due in no small part to its interconnection, openness and other features [23]. A user with entry permission and who manages site contents is called "Admin." The admin page should include a *username* and *password* in order to prevent unauthorized access to the control panel and database of the web site. Additionally, the admin page should be hidden so as not to appear on the main page and so that only the user "Admin" can access it.

3.14 Results of the System Designed

After analyzing the previous studies and looking at the experiences and details of the techniques used in designing and managing web sites, the author has compiled the information to design and build a web site for the College of Administration and Economics. This web site facilitates access to the College in addition to facilitating the dissemination of information through publishing activities and issues concerning the College or University. Furthermore, it achieves communication between students and staff by delivering lectures and exam grades via the college webmail as well as

sending and reserving formal papers between the College and other institutions. A page is created for each department of the college in order to publish activities, such as schedules, advertisements and exam results. Finally, the web site is available in two languages, namely English and Arabic in order to become an interactive site for the end user. According to the techniques and information previously discussed about building these web site pages, the following results were reached.

3.14.1 Webmail service

This page is considered to be the most important on the web site and represents the connection point between the College and other institutions as well as among staff and students. This service is designed exclusively for college members and students. The registration operation and creation of new accounts for staff or students is carried out by "Admin." This page enables users to send and receive information, documents and other files, as shown in Figures 17 and 18.

Figure 17 Webmail service

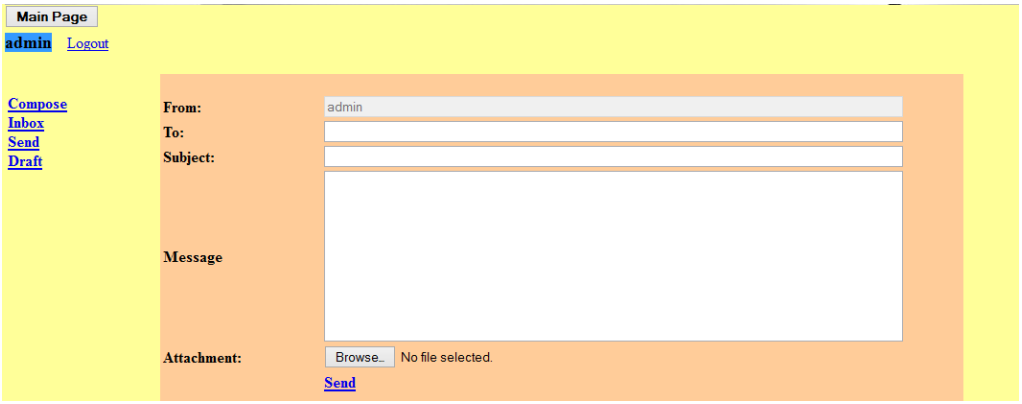

Figure 18 Email page

3.14.2 Admin page

The admin page is the point of entry to the control panel of the web site by authorized persons with a user name and password which enables him to enter and administer the site contents. Figure 19

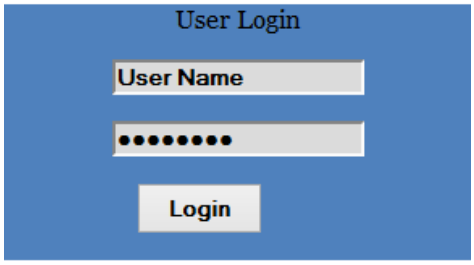

Figure 19 Admin Page

3.14.3 Page of control panel

This page contains a set of icons each of which is responsible for managing specific pages, such as publishing news, advertising and all activities of the College as well as the possibility of editing, adding and removing site contents in addition to the possibility of changing the interface designing of the web site. It can be summarized thus: See Figure 20

- Settings
- Database
- Security

- Edit page
- Add or remove news
- Add user or remove user
- Books
- Course
- Advertisement
- Media
- Change site designing

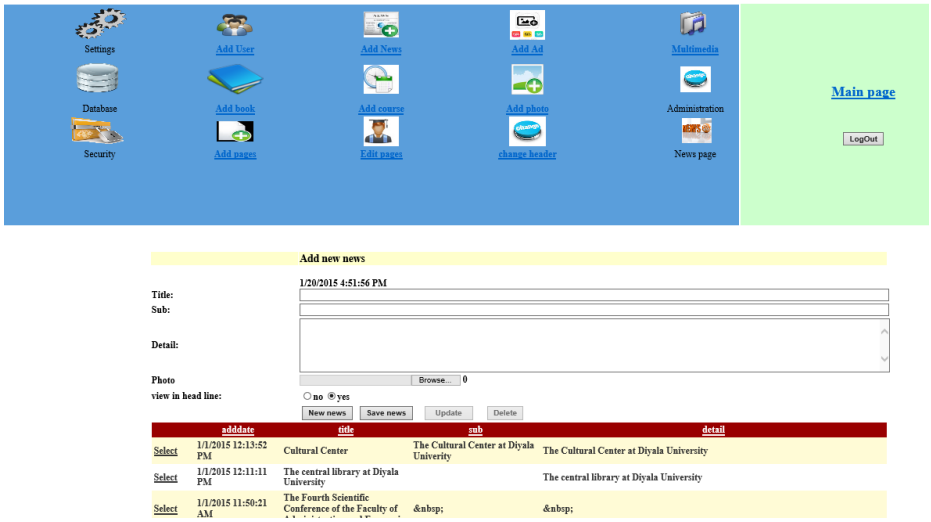

Figure 20 Page of control panel

3.14.4 Staff registration page

This page functions as the staff registration portal and includes information about staff such as name, password, confirm password, department, gender, date, certification, e-mail and address. The email extension should consist of the extension of the University, as seen in Figure 21

Figure 21 Staff registration page

3.14.5 Student registration page

This page functions as the student registration portal of the college and includes student information such as name, password, department, student ID, gender, birth date, e-mail, province, city and notes. Here, each student has his/her own page, which enables the student to connect with staff or the College, as shown in Figure 22.

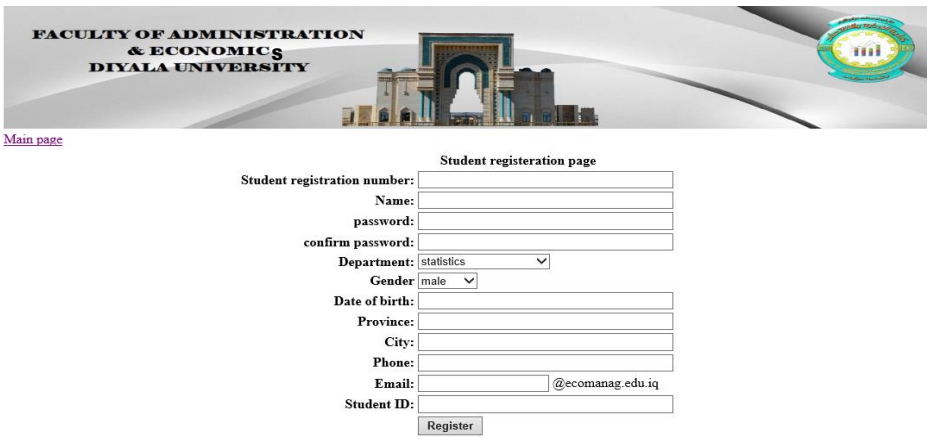

Figure 22 Student registration page

3.14.6 Departments

There are two departments in the College of Administration and Economics. These are the Economics department and the Statistic department. Each department has its own page with information about staff, courses, schedules and grades of exams. Figure 23 shows the Economics department.

Figure 23 Economic department

3.14.7 Students affairs

This page includes two fields, the first being "Announcements," which informs students about dates of exams and instructional discipline at the college. The second field pertains to alumni students, which includes all graduate students from the college, as shown in Figure 24.

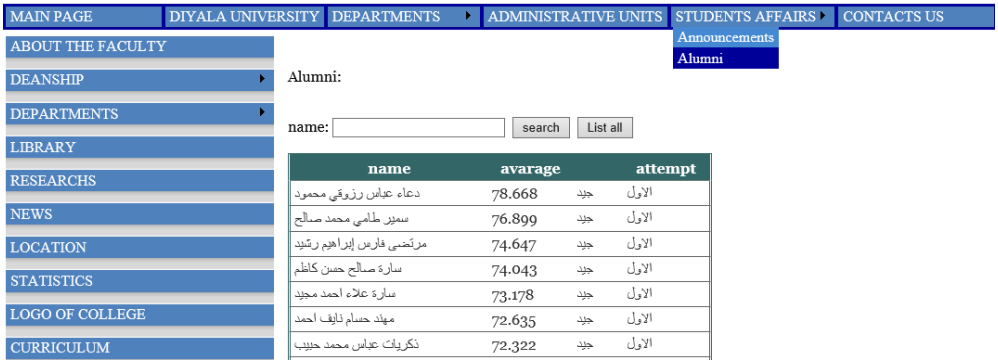

Figure 24 Alumni Page

3.14.8 Contact us

This page includes a set of addresses which enable users to contact the college by email or phone number, as shown in Figure 25.

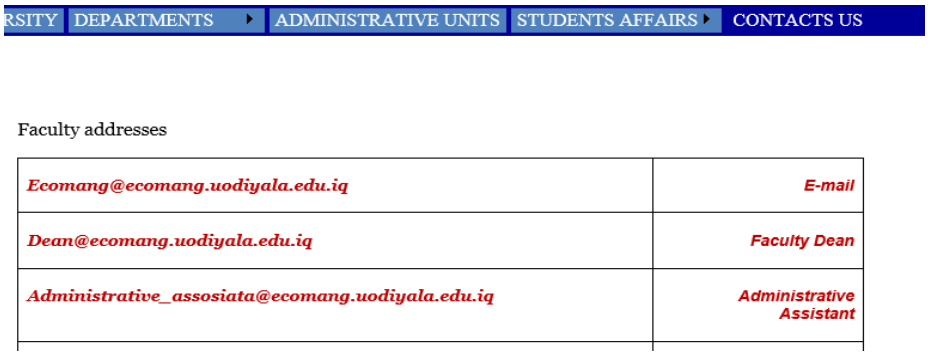

Figure 25 Contact us

3.15 The vertical template

The vertical template includes set of pages such as scientific research, statistics, Curriculum, college location, Organizational structure, library and logo of college.

3.15.1 Scientific researches page

This page includes all articles and abstracts of research carried out by the staff of the college. It consists of a set of fields such as *name*, *department*, *certificate*, *Abstract of research*, as shown in Figure 26.

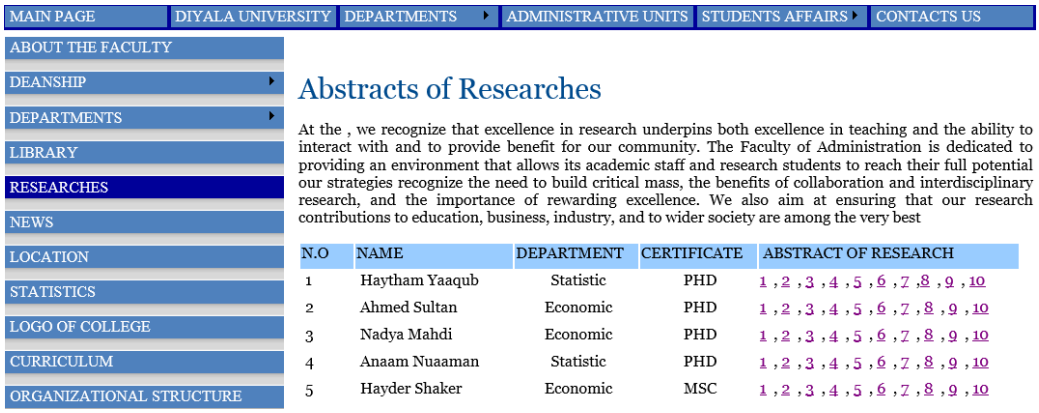

Figure 26 Scientific researches page

3.15.2 Statistics page

This page contains a set of statistics about the college, including the number of personnel in addition to the number of students. An example of statistics for staff according certificate is shown in Figure 27.

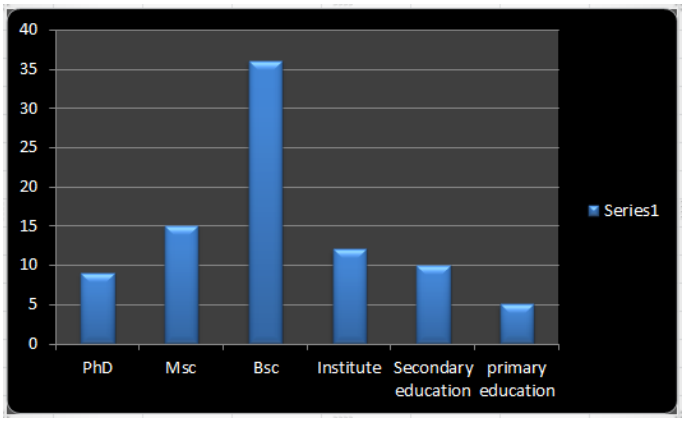

Figure 27 Statistics about Faculty staff

3.15.3 Curriculum page

The curriculum for each phase of study includes the course name, number of hours (theoretical and practical) in addition to the unit numbers for each course, as shown in Figure 28

Figure 28 Curriculum page

3.15.4 College location

This page includes the geographical location of the college on a map. The Faculty of Administration and Economics is located in Diyala Province about 60 kilometers northeast of Baghdad, as shown in Figure 29.

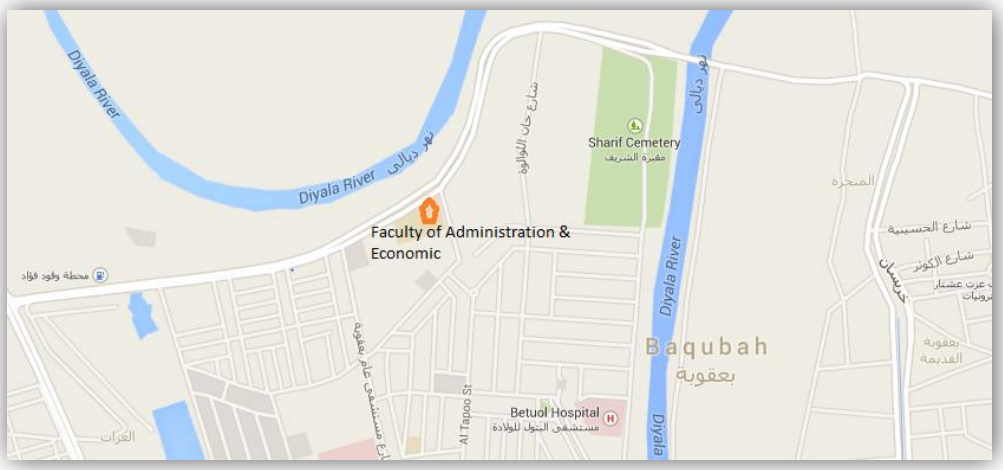

Figure 29 College Location

3.15.5 Organizational structure

This page contains the organizational structure of the College of Administration and Economics and includes a set of administrative units, as shown in Figure 30.

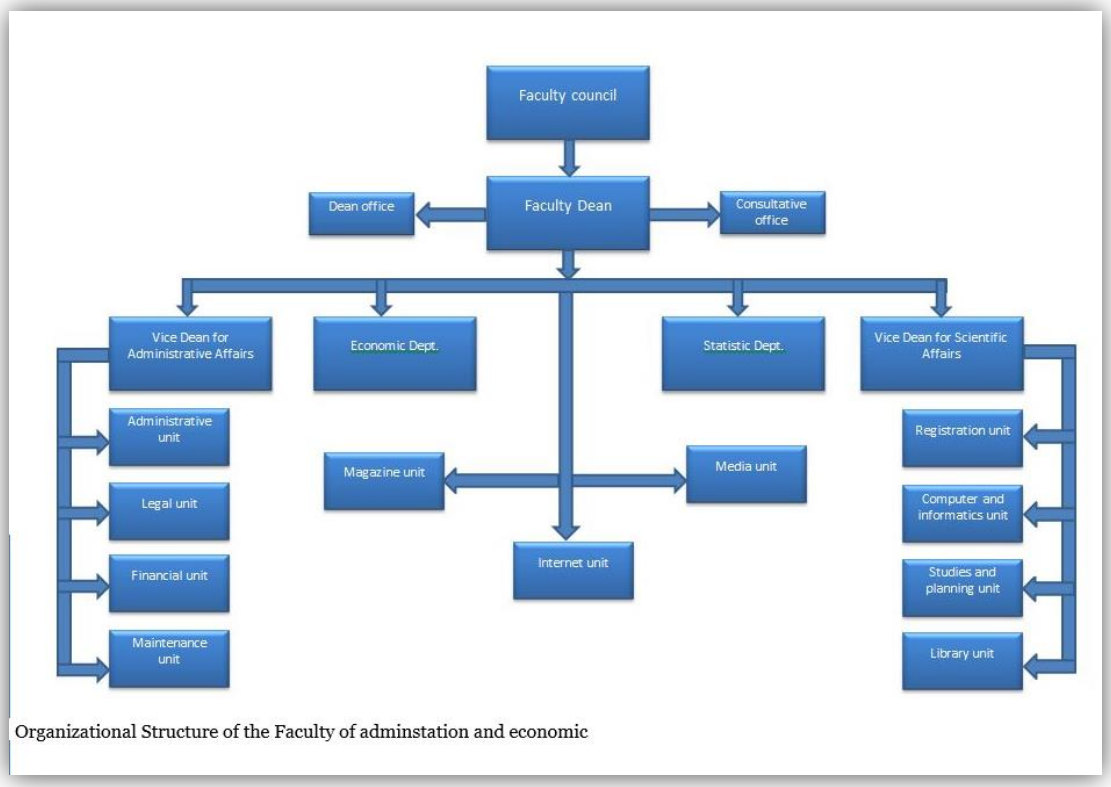

Figure 30 Organizational structure

3.15.6 Iraq virtual science library

This page provides free, full-text access to thousands of scientific journals from major publishers as well as a large collection of online educational materials. This entity enables users, especially students or staff, to access this library through registration on the library site.

3.15.7 The Arabic interface of the web site

The languages available on this site are English and Arabic, which enables different users to visit the site and take advantage of it. The Arabic interface is shown in Figure 31.

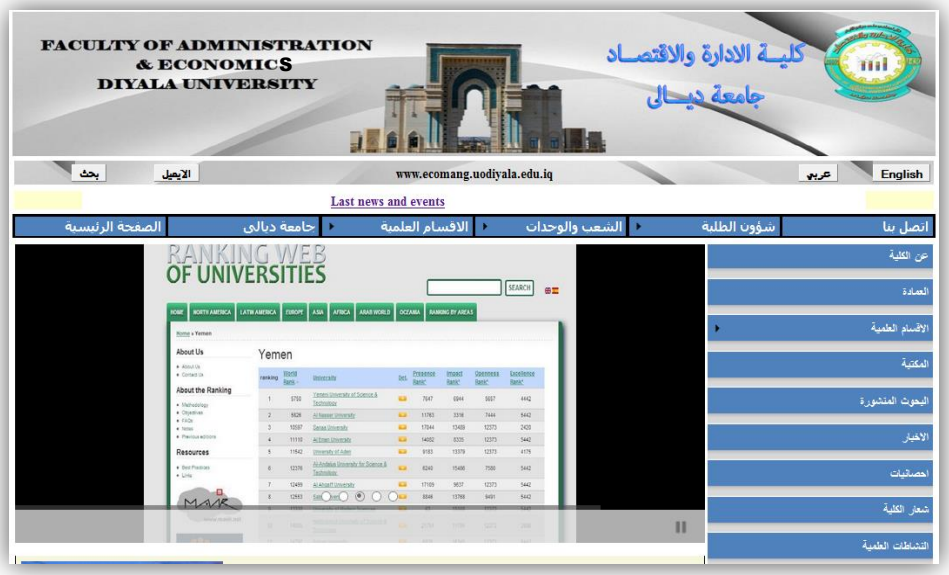

Figure 31 Arabic interface

3.15.8 The middle template

This area is allocated for publishing news. The latest news in the university or college, with photographs, is shown in Figure 32.

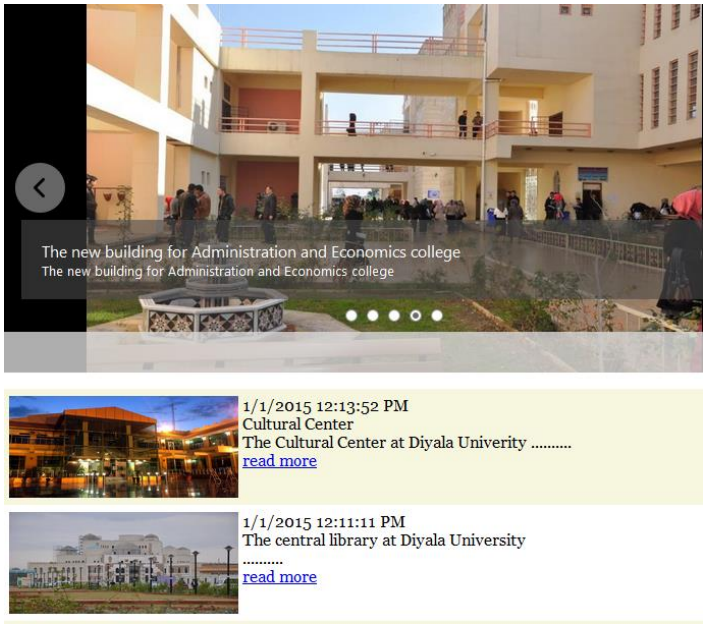

Figure 32 the middle template

3.15.9 Follow us

Nowadays, social media sites have become one of the important facilities in the electronic media. Therefore, it is made available to each user around the world. Examples include Facebook, Twitter, and YouTube, which enable people to exchange ideas and information in addition to pictures and videos in virtual communities and networks. For this reason, one is able to access the college site through posts, publishing news, ads and activities related to the University or College via Facebook, Twitter and YouTube, thereby enabling users to access the college site easily, as shown Figure 33.

Figure 33 Follow us

CHAPTER 4

CONCLUSION

4.1 Finding

Findings achieved of this study are as follows:

- Designing new web sites for Colleges of Administration and Economic – Diyala University by using Microsoft visual studio 2010 ultimate, ASP.Net which have many tools that help designers to produce and manage web content easily and more flexibly and to process most problems on the old web sites of the college.
- Exchanging formal papers between the college and other institutions by using the email service of the college as well as between administrative units in the college.
- Enhance the communication between students and staff by creating a personal page for every student and staff member in order to deliver information, such as lectures, dates of exams and exam results, to students.
- The interface of web sites available in two languages, English and Arabic, thereby enabling more users to visit these sites and take advantage of them.
- Ease of managing web site contents by using a control panel which enable administrator to control the web site contents easily and more flexibly.
- Achieving the usability of web sites and ease of navigation of web site pages through simple user interfaces in addition to the possibility of easy access to any page.
- Promoting the role of media of the college through coverage of activities and events which occur at the college or university.

4.2 Limitations

The work presented in this thesis has the following limitations:

- The web site does not contain the management system for the administrative unit or a student registration system.
- The page of the library needs a database system, including the publication of books and theses in addition to linking with international libraries where students and staff can access and take advantage of this library.
- The web site of the College requires specialist staff, including programmers, engineers and technicians to manage and develop the web site.
- The web site needs to be hosted on the server.

4.3 Future Studies

To enhance the performance of the proposed web site, some future studies are recommended:

- Designing a database management system for the administrative unit and student registration system by using Microsoft SQL Server in the building Database Management System DBMS and linking it with the College site.
- Create a sub site for the college library and building a database system, including books and theses in addition to academic literature for each teacher and linking it with the site of the College.
- Make up a special committee for the management and development of the web site, including engineers, technicians and programmers who will work as one team to manage and develop the college site.
- The University of Diyala has allocated a budget to each college and pays the cost of web site hosting.

4.4 Conclusion

In this study, we have introduced the web site of the College of Administration and Economics at University of Diyala. The main objective was to design and manage college web sites by using *Microsoft Visual Studio 2010 Ultimate* and *ASP.Net*, which contains many tools to help the designer to produce and manage web content easily and more flexibly and to process most problems on the old web site of the college in addition to enhancing communication between students and staff by delivering lectures, exam dates and exam results. The functions for which they were designed have been achieved. In this study, two programming languages were used to design and manage the web site including *ASP.Net*, which includes the C# language. The second language used is HTML with Microsoft Access being used to build databases for some pages of the web site. This web site will link the college to the outside world via the Internet, where each user is able to access and browse the web site easily and take advantage of the contents of the web site. In addition, this web site can promote the management of the college to carry out its tasks efficiently through the exchange of formal papers between college units by using the email service of the web site. The web site enables the media unit in the college to publish all news, activities and conferences which occur at the college or university. The proposed web site has achieved the purpose of this study, which includes the possibility of designing and managing the web site of the College of Administration and Economics - University of Diyala. The characteristics of this web site are the answer to most of the questions raised from the purpose of this study. The scale of efficiency of the web site is dependent on its ability to satisfy the user's requirements for the quality of information. Currently most universities use web sites to provide students and staff with interactive systems which accelerate communication and increase knowledge in every field of study.

REFERENCES

1. **Üngel E. and Öncü S., (2010),** "*Conducting Preliminary Steps to Usability Testing: Investigating the Website of Uludağ University*", Turkey, IEEE, pp. 890.

2. "*Abouttheuniversitywebsite*" http://www.en.uobaghdad.edu.iq/PageViewer.aspx?id=42, (Data Download Date: 20 August 2014).

3. **Banu R. K. and Ravanan R. A., (2011),** "*Analysis of E-learning in Data Mining – A Dreamed Vision for Empowering Rural Students in India*", India, IEEE, pp. 1265.

4. "*Establishment of University*" http://www.uodiyala.edu.iq/PageViewer.aspx?id=9, (Data Download Date: 4 September 2014).

5. **Hui Y., (2012),** "*Quality Evaluation System of Website Information Services Management*", Huangshi Institute of Technology, China, IEEE pp. 766.

6. **Diffily S., (2008),** "*Website Manager's Handbook by Shane Diffily*", First published August 2008, International Book, Chapter One, pp. 2-5.

7. **Zhao L. and Du S., (2010),** "*Design and Implementation of j2EE-based Web Website Content Management System*", China, IEEE, pp. 124.

8. *"ASP.NET Definition",* http://www.tutorialspoint.com/ASP.Net/, (Data Download Date: 7 September 2014).

9. **He K. and Zhang H. and Chen G., (2012),** "*The Construction and Management Practice of Website Group in University*", 3rd International Conference on System Science and Engineering Design, Anhui, China, IEEE, pp. 151-154.

10. **Pastore S., (2012),** "*The Role of Open Web Standards for Website Development Adhering to the One Web Vision*", International Journal of Engineering and Technology, Italy, pp. 1825-1828.

11. **Dang Y. and Chen Z., (2010),** "*Website Building Systems Design and Implementation Based on Content Management*", International Conference on Computer, Mechatronics, China, pp. 200-203.

12. **He W., (2011),** "*Using Wikis to Enhance Website Peer Evaluation in an Online Website Development Course: An Exploratory Study*", Journal of Information Technology Education, Virginia, USA, pp. 236-247.

13. **Hasan L., (2012),** "*Evaluating the Usability of Nine Jordanian University Websites*", The 2nd International Conference on Communications and Information Technology, Jordan, pp. 91-94.

14. **Zhang Y., (2011),** "*WFCMS: An Excellent Web Content Management System*", Department of Education Science and Media Engineering, IEEE, China, pp. 3305- 3307.

15. **Liduo H. and Yan C., (2010),** "*Design and Implementation of Web Content Management Systems by J2EE-based Three-tier Architecture*", Applying in Maritime and Shipping Business, China, IEEE, pp. 236-239.

16. **İşman A. and İşbulan O., (2010), "***Usability Level of Distance Education Web site***",** The Turkish Online Journal of Educational Technology, Turkey, TOJET, pp. 243-246.

17. **Xu A. and Gao S., (2012),** "*Discussion on Usability and Optimization Issues in Overseas University Web sites: A British University as an Example*", 11th International Symposium on Distributed Computing, China, IEEE, pp. 482-484.

18. **Mich L., (2014),** "*Evaluating Web site Quality by Addressing Quality Gaps: A Modular Process*" International Conference on Software Science, Technology and Engineering, Italy, IEEE, pp. 42-48.

19. **Huan R and Rongtao H., (2012), "***Research on User-Based Web site Design for Sino Foreign Cooperative Education Project of University***",** 7th International Conference on Computer Science and Education, Melbourne, Australia, IEEE, pp. 1560-1563.

20. **Deperlioglu O. Arslan Y., (2009),** "*Design Principles of Web-Based Distance Education Systems and Sample Application in Afyon Kocatepe University*", Vocational School of Distance Learning, Turkey, IET, pp. 286-287.

21. **Schultz D. and Cook C., (2007),** "*Beginning HTML With CSS and XHTML Modern Guide and Reference*", IET, United States, pp. 21-26.

22. **Vue X. and Song J., (2010),** "*Design of Stock Management Systems based on Microsoft Access*", International Conference on Computer and Communication Technologies, China, pp. 186.

23. **He L. and Fang Y.and Liu L., (2013),** "*Web site Regional Rapid Security Detection Methods*", Fifth International Conference on Computational Intelligence China, IEEE, pp. 186-187.

APPENDICES A

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Talal, Mohammed Layth

Date and Place of Birth: 30 March 1983, Diyala

Marital Status: Married

Phone: +9647705302020

Email: mohammed_layth30@yahoo.com

EDUCATION

Degree	Institution	Year of Graduation
M.Sc.	Çankaya University, Mathematics and Computer Science, Information Technology Program	2015
B.Sc.	Yarmouk University College Computer Science	2006
High School	Al-Sharef Al-Radee School	2002

WORK EXPERIENCE

Year	Place	Enrollment
2008- Present	University of Diyala, College of Administration and Economic	Specialist

FOREIGN LANGUAGES

English

HOBBIES

Football, Swimming, Traveling, Reading.