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WEB CONTENT MANAGEMENT

PROJECT REPORT

Submitted By

K. SRIDHAR

Register No: 0720300047

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

COMPUTER APPLICATIONS

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

May 2010

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Coimbatore)

COIMBATORE – 641 006.

Department of Computer Applications

PROJECT WORK

MAY 2010

This is to certify that the project entitled

WEB CONTENT MANAGEMENT

is the bonafide record of project work done by

K. SRIDHAR

Register No: 0720300047

of MCA (Computer Applications) during the year 2009-2010.

N. Jayakarthan

Project Guide

Head of the Department

Submitted for the Project Viva-Voce examination held on 17-05-2010

17/5/10

Internal Examiner

17/5/10

External Examiner

DECLARATION

I affirm that the project work titled **WEB CONTENT MANAGEMENT** being submitted in partial fulfilment for the award of **MASTER OF COMPUTER APPLICATIONS** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

(Signature of the Candidate)

K.SRIDHAR

0720300047

I certify that the declaration made above by the candidate is true

N. Jayakanthan

Signature of the Guide,

Mr. N. JAYAKANTHAN

Senior Lecturer, MCA

Majestic People

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www.majesticpeopleinfotech.com

10 .05.2010

TO WHOMSOEVER IT MAY CONCERN

This is to inform that **Mr.Sridhar.K (Reg. No:0720300047)** of **Kumaraguru College of Technology,** studying **Final year MCA** has successfully completed the assigned tasks in the project **"Web Content Management"** in **ASP .NET** as and **MS SQL Server** as **Back End** for our Majestic people infotech Pvt Ltd from **December 2009** to **May 2010**

During this tenure, he adhered to the professional code of conduct/ethics of **MAJESTIC PEOPLE**.

For Majestic People Infotech Pvt Ltd

10/05/10

VijayaKrishnan.S

HR Manager

Majestic People Info Tech (P) Ltd CBE-11

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I wish to thank my Project Co-ordinator **Mr. S. Hameed Ibrahim, Senior Lecturer** Department of Computer Applications, Kumaraguru College of Technology, for his sincere advice, thought provoking discussions and immense help throughout the project and encouragement given by him.

I wish to thank my Project guide **Mr. N. Jayakanthan, Senior Lecturer** Department of Computer Applications, Kumaraguru College of Technology, for his sincere advice, thought provoking discussions and immense help throughout the project and encouragement given by him.

It is my pleasure to express my profound gratitude to **Magestic People Infotech, Coimbatore** for admitting into this project. I am thankful to **(Mr.V.Vijay)** of Magestic People Infotech, Coimbatore, for this excellent guidance, timely suggestions and constant support in all my endeavors.

I wish to thank all my staff members for their timely help and guidance to complete the project successfully.

Also I would like to thank my parents, friends, and all those who helped me in this project and whose names are leftover.

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Abstract

This Project Entitled as "Web Content Management" it is a web application which consists of different courses Customers who want to have knowledge about any subject can take up the course related to it and can have a thorough understanding. They can take up the test to know their level of understanding and can obtain certificates if their level is measured above a certain percentage of marks.

The Administrator will create a website and assign a course to it. The user can register for a course either directly entering details in website. Once the course is completed, the user needs to appear for the exam and meet the minimum criterion to have the certificates. These certificates are sent directly or in Email as a PDF format.

Administrator maintains the overall process, can also add or delete the course category from the website. The admin also create the question to the appropriate courses these questions are added to the suitable course with the help of the XL sheet.

This application is work under the Microsoft Visual Studio 2005 and MS SQL Server 2005.

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1. Introduction

1.1 Organization Profile:

Majestic People Infotech (P) Ltd.

Majestic People Infotech (MPI), founded in 2001 is a rapidly growing software development company specialised in Web Application development, Enterprise solutions, SCM Methodology and RFID with its headquarters in Jacksonville, Florida.

MPI has a wide range of website design, development and programming services ranging from simple HTML based website design to complex AJAX based web development and programming, multimedia and secure e-commerce web applications. We work with your company to define objectives and develop graphic design for your website and interactive tools to achieve them.

The benefits with MPI are Access to new technology, Accelerate cost savings, Improved focus on core responsibilities, Flexibility, Rapid implementation , Reduced risk , Achieving the highest quality standards, Reduce operational expenses , Maximize return on existing e-procurement assets, Provide total spend visibility.

Corporations worldwide are looking towards high quality and reduced cost of IT services. We, in our mission to offer Quality solutions at a competitive price, have our state-of-the-art. SEI CMMI level 5 assessed Offshore Development Centre (ODC) located in Coimbatore, India. MPI is currently aligning its processes to SEI CMMI Level 5.
Here's what makes us your ideal offshore partner: ODC your ideal offshore partner

- Using our unique minimum-code technology we can build your software application two to three times quicker than any other traditional offshore development company and can reduce your total cost of ownership of IT assets by up to 40%.
- We specialize in developing applications using any software platforms and

- We work as your extended development arm. In addition, we bring all the traditional offshore advantages including cost, 24X7 support, quality process, state-of-art infrastructure including VPN and VOIP support, domain, technical and project management expertise.
- SGS has implemented many software development projects across geographies including USA, Europe, Singapore and India.
- SGS Offshore development Centre (ODC) is strategically located at Coimbatore, India and provides organizations access to its state-of-the-art facility giving considerable savings on cost and time.

1.2 Project Overview:

This Project Entitled as "Web Content Management" it is a web application which consists of different courses Customers who want to have knowledge about any subject can take up the course related to it and can have a thorough understanding. They can take up the test to know their level of understanding and can obtain certificates if their level is measured above a certain percentage of marks.

The Administrator will create a website and assign a course to it. The user can register for a course either directly entering details in website. Once the course is completed, the user needs to appear for the exam and meet the minimum criterion to have the certificates. These certificates are sent directly or in Email as a PDF format.

Administrator maintains the overall process, can also add or delete the course category from the website. The admin also create the question to the appropriate courses these questions are added to the suitable course with the help of the XL sheet.

The online exam has been conducted with in the time duration. When will the user start the exam the time will be starting, if the user can not finish the exam with in the time the user can log out automatically from our login.

2. System Analysis

2.1 Existing System

The Existing way of making changes to the web content is by downloading the web pages over the Internet and updating the contents and republishing the web pages back to the server. This requires knowledge of HTML on the part of the user. This is a manual approach and the presence of a large number of pages in the website makes it increasingly complex and tedious to maintain them.

2.1.1 Drawbacks of the existing system

- Unreliable and unsecured.
- Cost factor is high.
- More time to be processed and complexity.

2.2 Proposed System

The proposed system eradicates the setbacks of the existing system by providing a rich GUI interface, which helps to make any change to the web content - online without having to download the file over the Internet. Content Management takes care of the Pages, text, images or any mime type content, navigation bars, links, templates and other components.

2.2.1 Benefits of Proposed System

- GUI to modify and edit the contents of a website.
- Maintains navigation bars, components, contents etc..
- Helps in Maintaining audit trails for WebPages
- Changes of WebPages can be done at a faster rate

3. System Requirements Specification

3.1 Hardware Environment

Processor	:	Intel Pentium IV
Speed	:	3.1 GHZ
Memory	:	1 GB RAM
Hard Disk Capacity	:	80 GB
Monitor	:	15" inch SVGA
Mouse	:	Logitech Mouse (Scroll)
Keyboard	:	108 Keys

3.2 Software Environment

Operating System	:	Windows XP
Designing Tool	:	HTML, CSS, JAVA SCRIPT
Scripting Language	:	ASP .NET
Web Server	:	Internet Information Server
Back-end	:	MS SQL 2005

3.3 Software Overview

WINDOWS-XP

Windows-XP is a powerful system. It includes many useful programs and accessories. It provides a wealth of features and it keeps the complex features relatively simply to use. It tries to create a work environment for the computers that model the actual working environment on our desk. Windows–XP has many new and enhanced features.

- It has the facility for multitasking.
- It is user friendly.
- Every application has its own online help facility.

.NET FRAMEWORK

The .NET Framework is many things, but it is worthwhile listing its most important aspects. In short, the .NET Framework is:

A Platform designed from the start for writing Internet-aware and Internet-enabled applications that embrace and adopt open standards such as XML, HTTP, and SOAP.

This Framework is the platform that provides a number of very rich and powerful application development technologies, such as Windows Forms, used to build classic GUI applications, and of course ASP.NET, used to build web applications. A Platform with an extensive class library that provides extensive support for date access (relational and XML), a director services, message queuing, and much more.

A platform that has a base class library that contains hundreds of classes for performing common tasks such as file manipulation, registry access, security, threading, and searching of text using regular expressions.

A platform that doesn't forget its origins, and has great interoperability support for existing components that you or third parties have written, using COM or standard DLLs.

A Platform with an independent code execution and management environment called the Common Language Runtime(CLR), which ensures code is safe to run, and provides an abstract layer on top of the operating system, meaning that elements of the .NET framework can run on many operating systems and devices.

ASP.NET

ASP.Net is part of the whole. NET framework, built on top of the Common Language Runtime (also known as the CLR) - a rich and flexible architecture, designed not just to cater for the needs of developers today, but to allow for the long future we have ahead of us. What you might not realize is that, unlike previous updates of ASP, ASP.Net is very much more than just an upgrade of existing technology – it is the gateway to a whole new era of web development.

ASP.Net is a feature at the following web server releases

- Microsoft IIS 5.0 on WINDOWS 2000 Server
- Microsoft IIS 5.1 on WINDOWS XP

ASP.Net has been designed to try and maintain syntax and run-time compatibility with existing ASP pages wherever possible. The motivation behind this is to allow existing ASP Pages to be initially migrated ASP.Net by simply renaming the file to have an extension of .aspx.

For the most part this goal has been achieved, although there are typically some basic code changes that have to be made, since VBScript is no longer supported, and the VB language itself has changed.

Benefits of ASP.Net

The .NET Framework includes a new data access technology named ADO.Net, an evolutionary improvement to ADO. Though the new data access technology is evolutionary, the classes that make up ADO.Net bear little resemblance to the ADO objects with which you might be familiar. Some fairly significant changes must be made to existing ADO applications to convert them to ADO.Net. The changes don't have to be made immediately to existing ADO applications to run under ASP.Net, however.

ADO will function under ASP.Net. However, the work necessary to convert ADO applications to ADO.Net is worthwhile. For disconnected applications, ADO.NET should offer performance advantages over ADO disconnected record sets. ADO requires that transmitting and receiving components be COM objects. ADO.Net transmits data in a standard XML-format file so that COM marshaling or data type conversions are not required.

Structured Query Language (SQL)

To work with data in a database, you must use a set of commands and statements (language) defined by the DBMS software. There are several different languages that can be used with relational databases; the most common is SQL. Standards for SQL have been defined by both the American National Standards Institute (ANSI) and the International Standards Organization (ISO). Most modern DBMS products support the Entry Level of SQL-92, the latest SQL standard (published in 1992).

4. System Design

4.1 Diagrams

DFD diagram:

Level 0:

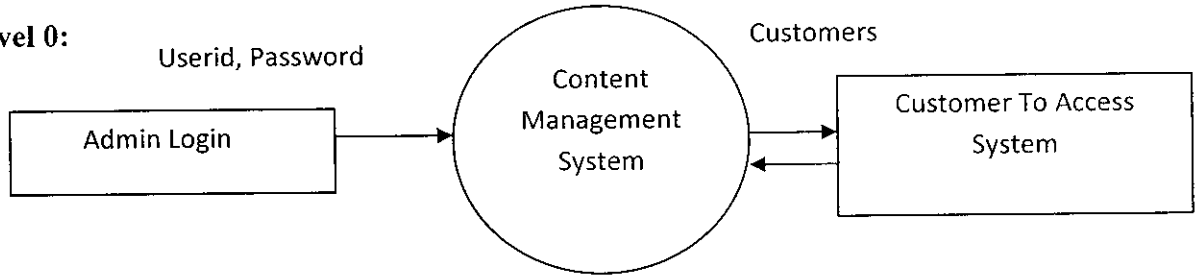


Figure 1.1

Level 1:

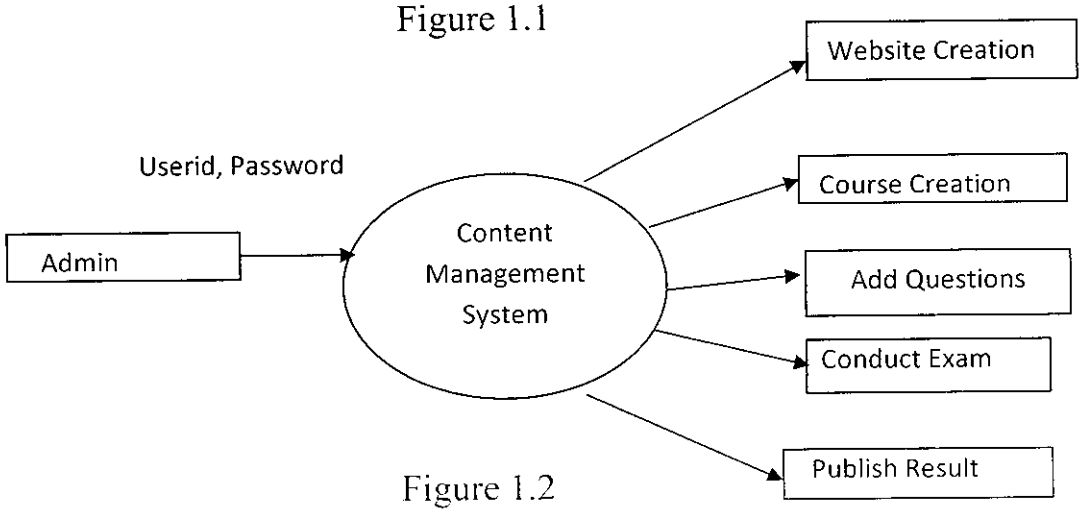
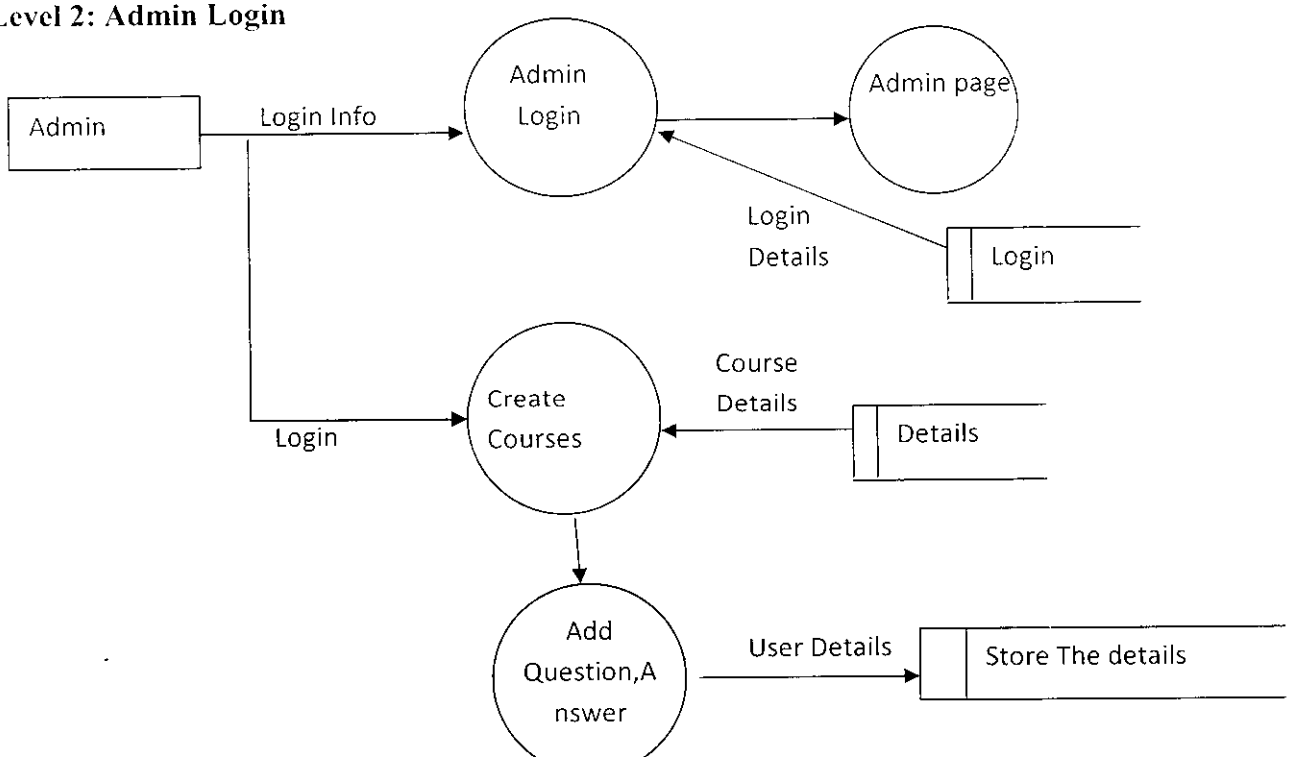


Figure 1.2

Level 2: Admin Login



Level 2: Customer Login

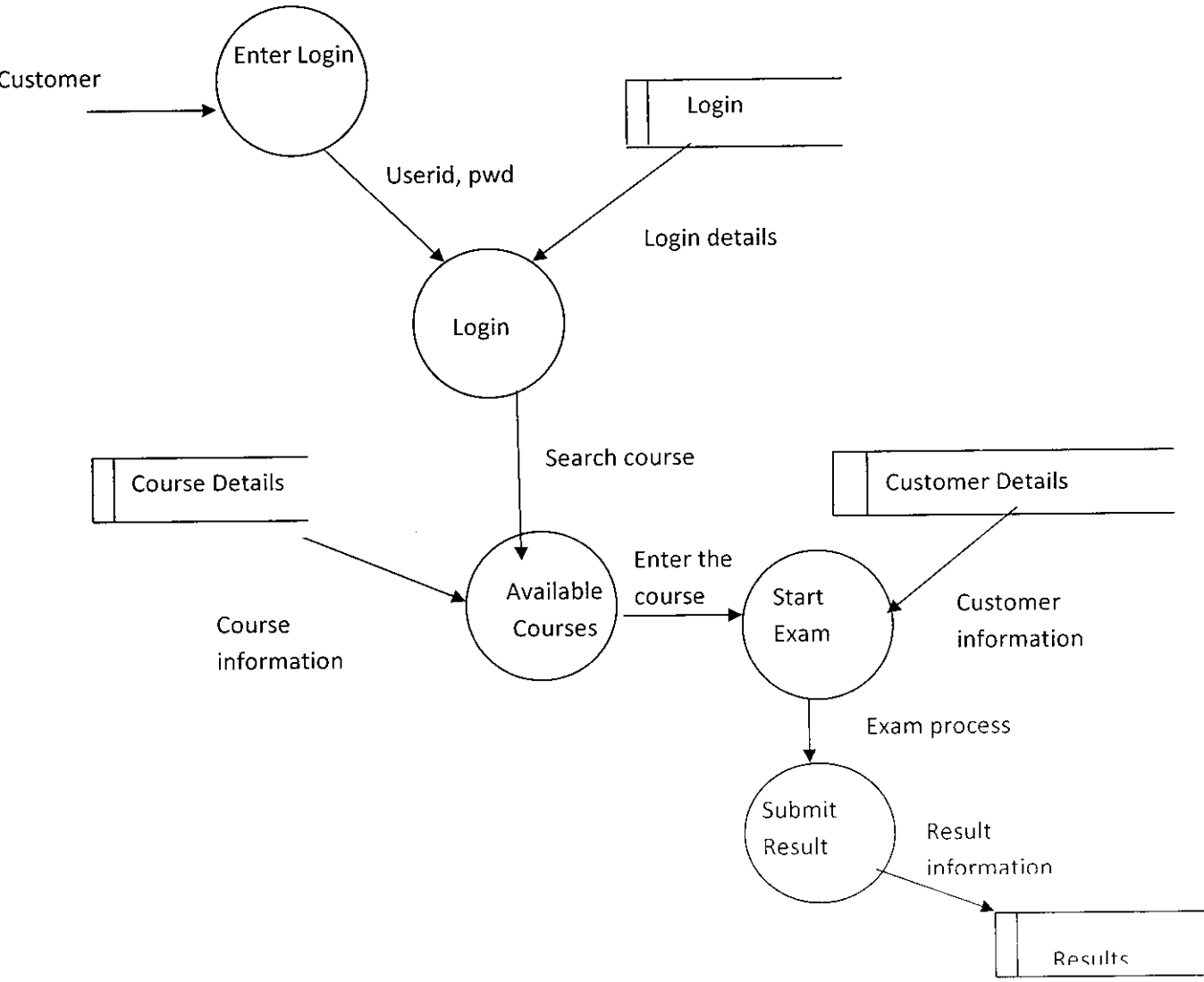


Figure1.3.2

Language (UML) created from a use case analysis. Its purpose is to p[illegible] overview of the functionality provided by a system in terms of actors, their goals represented as use cases and any dependencies between those use cases.

Actors

This system will be used by the following actors:

1. Admin
2. Customer

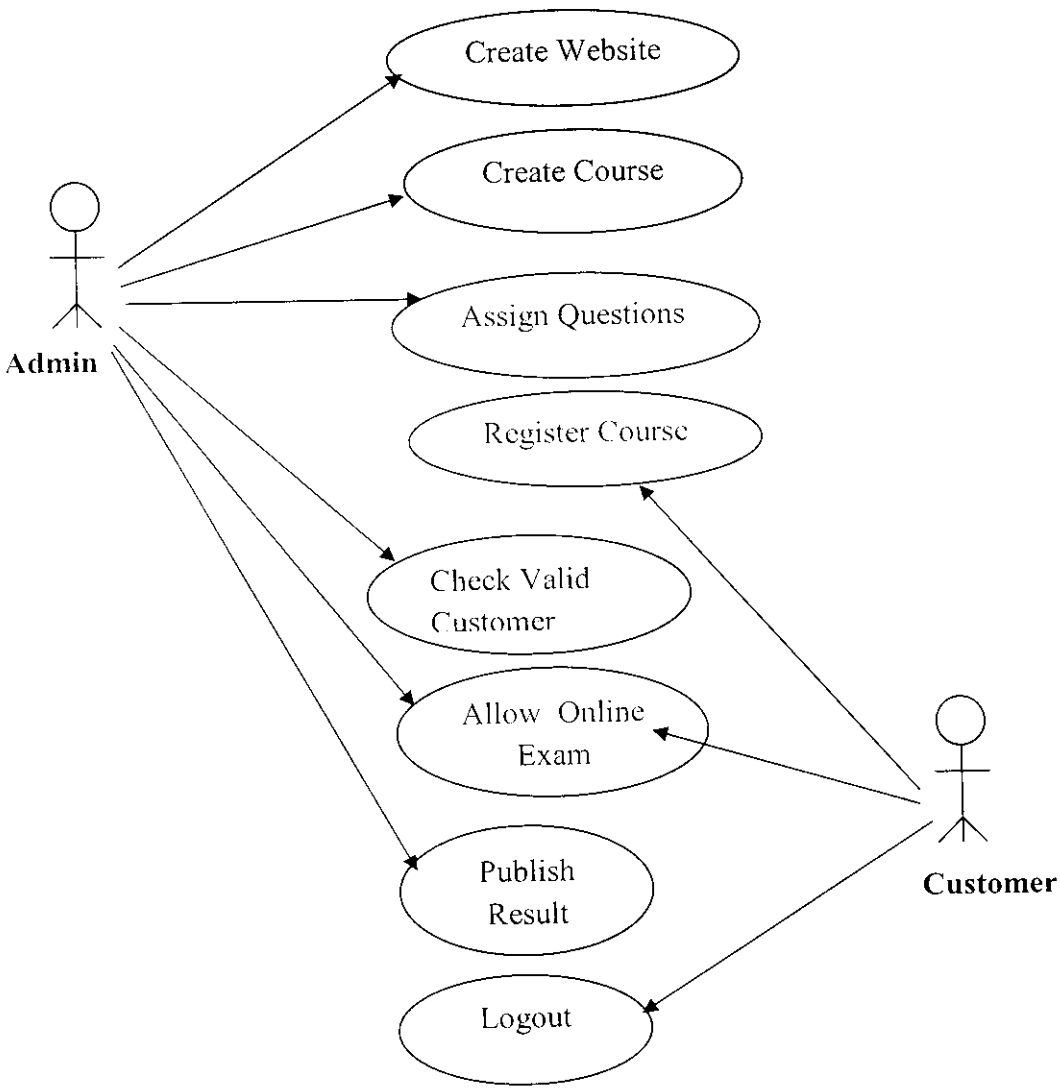


Figure 1.4

4.2.1 Input Design

Input design is a process of converting the user-originated inputs into the computer-based format. The goal of designing input data is to make the automation as easy and free from errors as possible. The requirements of input design such as user friendliness, consistent format and interactive dialogues for giving the right message and help for the user at right time are also considered for the development of the project.

The inputs forms used in this system are:

a. **Admin and Customer login page:**

The Admin enter the valid username and password to add new course and questions. It allows the existing users to log on the site and to create new login for new users.

b. **Add Course:**

The admin has the authority to add the courses and update the courses Each course details has been completely described. .

c. **Add Questions:**

The admin also enter the questions to the corresponding courses, the XL sheet only have the questions it will imported to the appropriate courses.

d. **Customer Registration page:**

The customer to register the details and after to select the course and to write the online exam for selected courses.

e. **Online Exam page:**

The registered customer to start the exam. The questions are displayed and the suitable answer to be selected finally the result will be displayed .

4.2.2 Output Design

The Output is mainly used to communicate with the user, processing the input data given by the user. It is documented in each stage of the project to ensure error free output. The output screens are designed in a very simple and easy to understand format. All user options are presented in well-formatted forms. The user friendliness of the output screen makes it very easy to use. The quality refers to the way by which the output is presented to the user.

4.2.3 Database Design

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. During database design analyst studies the data to

computer.

The details about the relevant data for the system are first identified. According to their relationship, tables are designed through following method.

- The data type for each data item is decided.
- The tables are then normalized.

4.2.3.1 Table Structure:

The databases in this project are,

1. **Table Name:** Admin Table

Name	Data Type and Width	Constraint	Description
User_name	varchar (15)	Primary Key	Administrator Username
Password	varchar(15)	Not Null	Administrator Password

2.**Table Name:** Add Course Details

Name	Data Type and Width	Constraint	Description
Course_name	varchar (50)	Primary Key	Course Name
Duration	int(10)	Not Null	Course Duration
Description	varchar(50)	Not Null	Course Description

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Name	Data Type and Width	Constraint	Description
Name	varchar (50)	Primary Key	Customer Name
Course_name	varchar(50)	Foreign key	Course Name
DOB	Date/time	Not Null	Date Of Birth
Gender	varchar(15)	Not Null	Customer Gender
User_name	varchar(100)	Not Null	User Name
Password	varchar(15)	Not Null	Password
firm_password	varchar(15)	Not Null	Conformation Password
Email	nvarchar(100)	Not Null	Customer Email
Questions	nvarchar(100)	Not Null	Questions
Answer	nvarchar(100)	Not Null	Answer

4.**Table Name:** Question Table

Name	Data Type and Width	Constraint	Description
Question_id	numeric (15)	Primary Key	Question identification
Question	varchar(50)	Not Null	Questions Of The Course
Answer1	nvarchar(100)	Not Null	First Answer
Answer2	nvarchar(100)	Not Null	Second Answer
Answer3	nvarchar(100)	Not Null	Third Answer

_explanation	nvarchar(100)	Not Null	Answer Explanation
Ques_order	Int(10)	Not Null	Question Order

5.**Table Name:** Customer Result Table

ne	Data Type and Width	Constraint	Description
User_name	varchar (50)	Foreign key	User identification
Question_id	numeric(15)	Foreign key	Question identification
Score	int(50)	Not Null	Exam Result Score

4.2.4 Modular Design

This System has three main modules such as,

- ✓ Admin Module
- ✓ Customer Module

Admin Module:

Admin Login form: It allows the administrator to log on the site and to create the website and also create the courses.

✓ Admin have the authority for edit and update the courses , admin also include the questions to the appropriate course.

✓ Admin to import the XL sheet for the corresponding courses.

Customer Module:

The customer first to register the details with course name after the available course will display the customer to choose the course and write the test.

- The customer click start button to start the exam , the time can be notified. If the time has been finished the customer logon has terminated.
- The score will be displayed after complete the exam to the appropriate customer.

5.1 System Verification

Verification testing checks whether the product development is moving towards the actual product needed by the customer requirements and specification.

Verification is done in a step by step process.

In the Intranet Chat and Communication System, verification was done during the development itself. Each database bindings are verified after binding to test whether the control is bound to the right data field.

5.2 System Validation

Validation testing is done to ensure whether the work steps and deliverables during the project are acceptable. It verifies whether right data is being accessed and performs the functions properly.

In the Intranet Chat and Communication System, for example it verifies whether the users set status as busy or available, if the user is busy then no other can able to with the particular user. Validation is performed after a work product is produced against established criteria ensuring that the product integrates correctly into the environment.

It determines the correctness of the final software product by a development project with respect to the user needs requirements.

5.3 Testing

Testing is executing a program to test the logical changes needed in it and with intention of finding errors. Tests are conducted to find discrepancies between the new system and its original objective, current specifications and documents

5.3.1 Unit Testing

In unit testing, we have to test the program making up the system. Unit testing focuses first on the modules independently of one another, to locate errors. This enables within that module alone.

In this project, each page was tested separately as a unit. The flow of control and data through that page was tested. Each page is tested with the previously prepared test cases to find cases to find errors in the page. After rectifying the errors, once again it was tested to ensure whether there was no error.

Integrations testing for conducting tests to uncover errors associated within the interface. The objective is to take unit-tested module and build a program structure. The entire module are combined and tested as whole.

In chat and communication System, top down integration testing was followed. In this system, for example, first the user should give the name of valid username. If the user name is not valid this will show the label as "This username not available". This process is continued from the page level to module level and finally the whole system is tested.

5.4System Implementation

The implementation of the "Web Content Management" application involves the individual programming, system testing, user training and the operational running of developed system that application subsystems. One major task of preparing for implementation to the online exam.

The implementation phase of software development is concerned with translating design specifications into source code. The developed system is tested by the user and changes are made according to their needs.

A crucial phase in the system life cycle is the successful implementation of the new system design. Implementation simply means converting a new system design into operation.

The Admin Module has very useful to the users. Then the Users can write the exam with the help of the admin module.

This involves,

- Website creation, Course creation,
- Insert questions , allow the customer to write the exam and publish the result

The application developed and designed in such a way that any further enhancements can be done with ease. The system has the capability for easy integration with other systems. New modules can be added to this system with less effort.

The system has been found to work effectively and will be implemented in short period of time. Proper documentation is provided. The end user can easily understand how the whole system is implemented by going through the documentation. The module developed would be friendly and does demand a little computer knowledge to work.

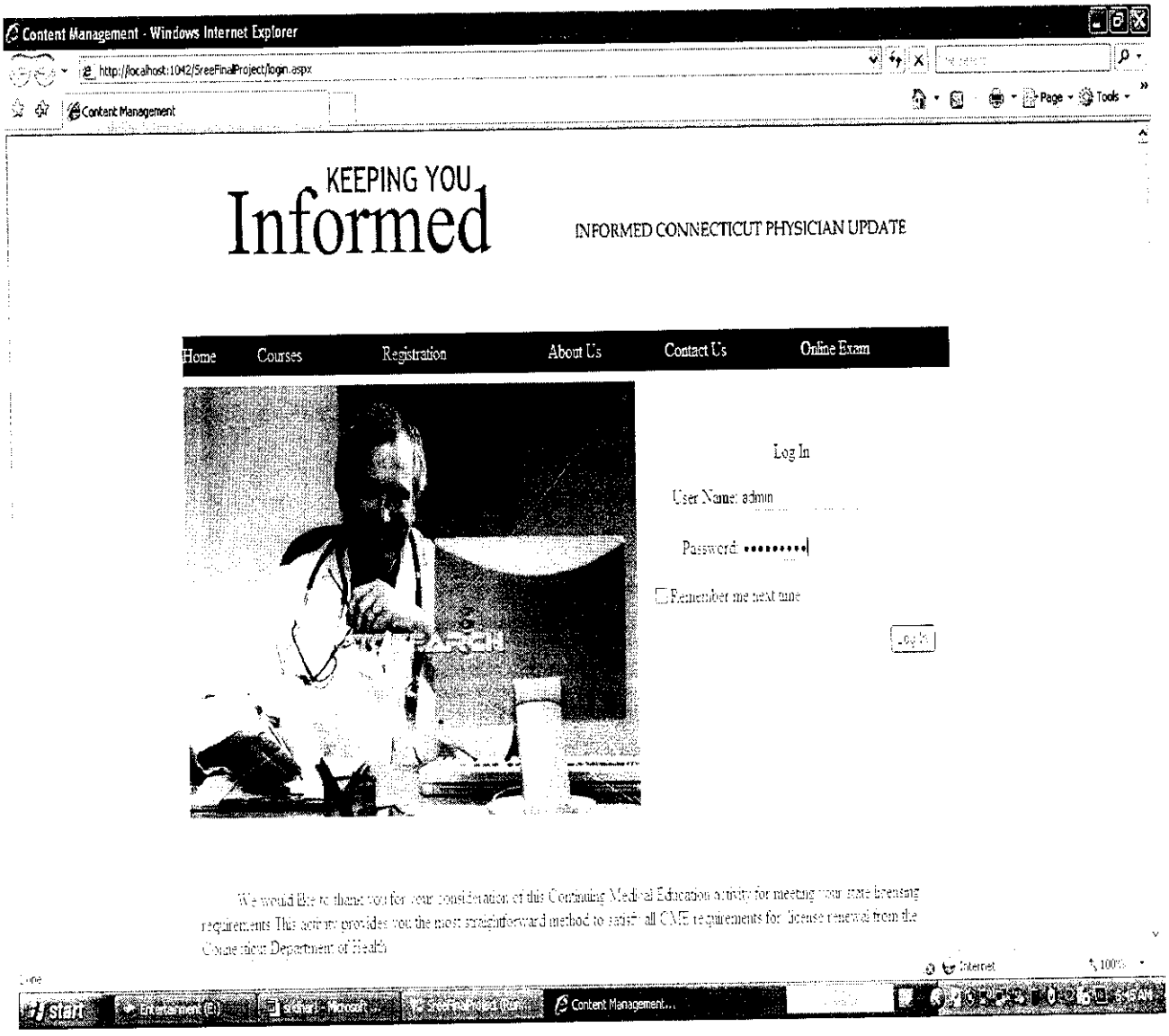
The system has been keeping in mind all the given possible conditions and found to work efficiently and effectively.

6.2 Future Enhancement

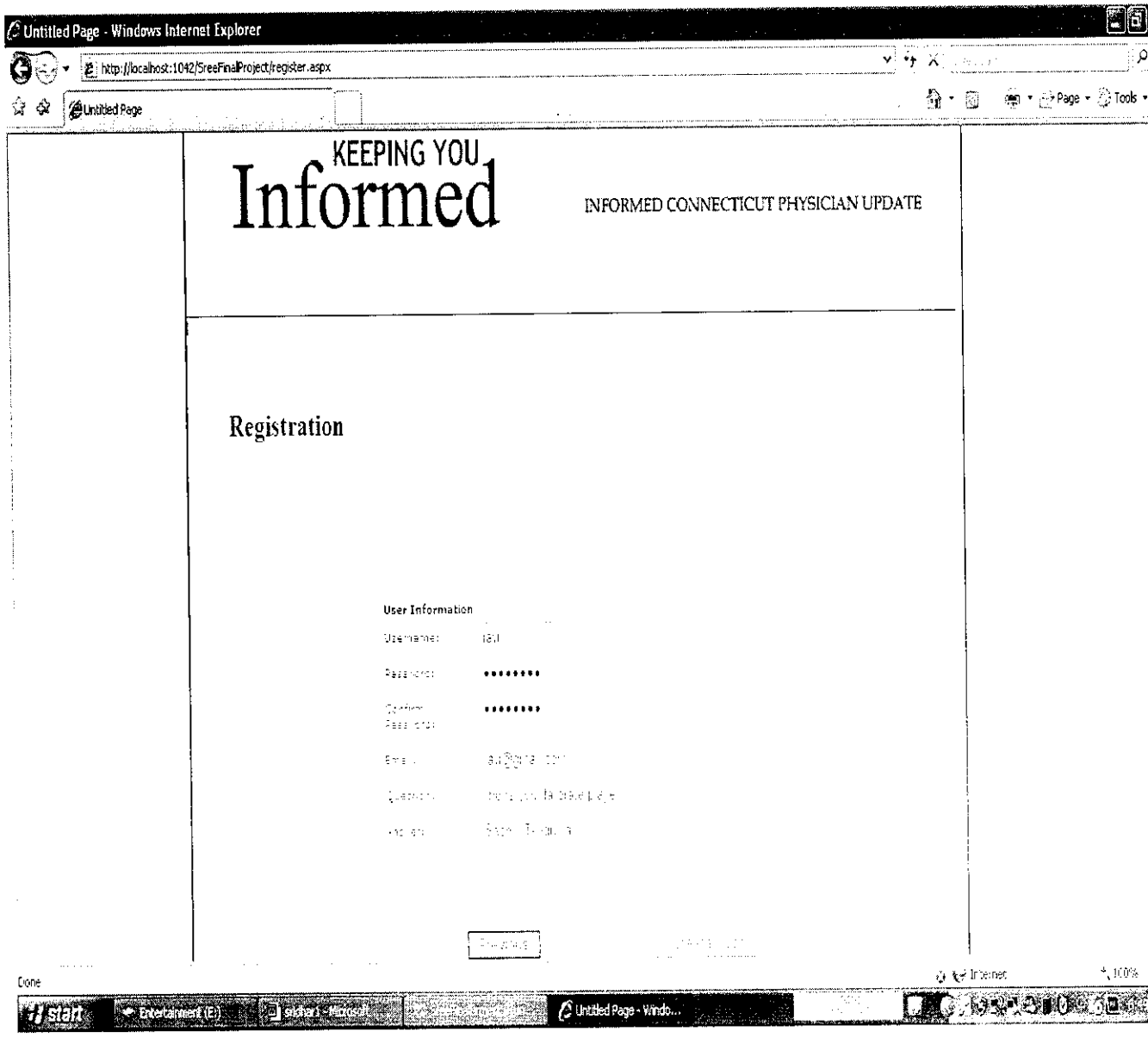
"Web Content Management" application will be enhanced further with the following futures

- By developing Video Conference it has been used to avoid the unrelated incidents.
- To select the random question from the different database.

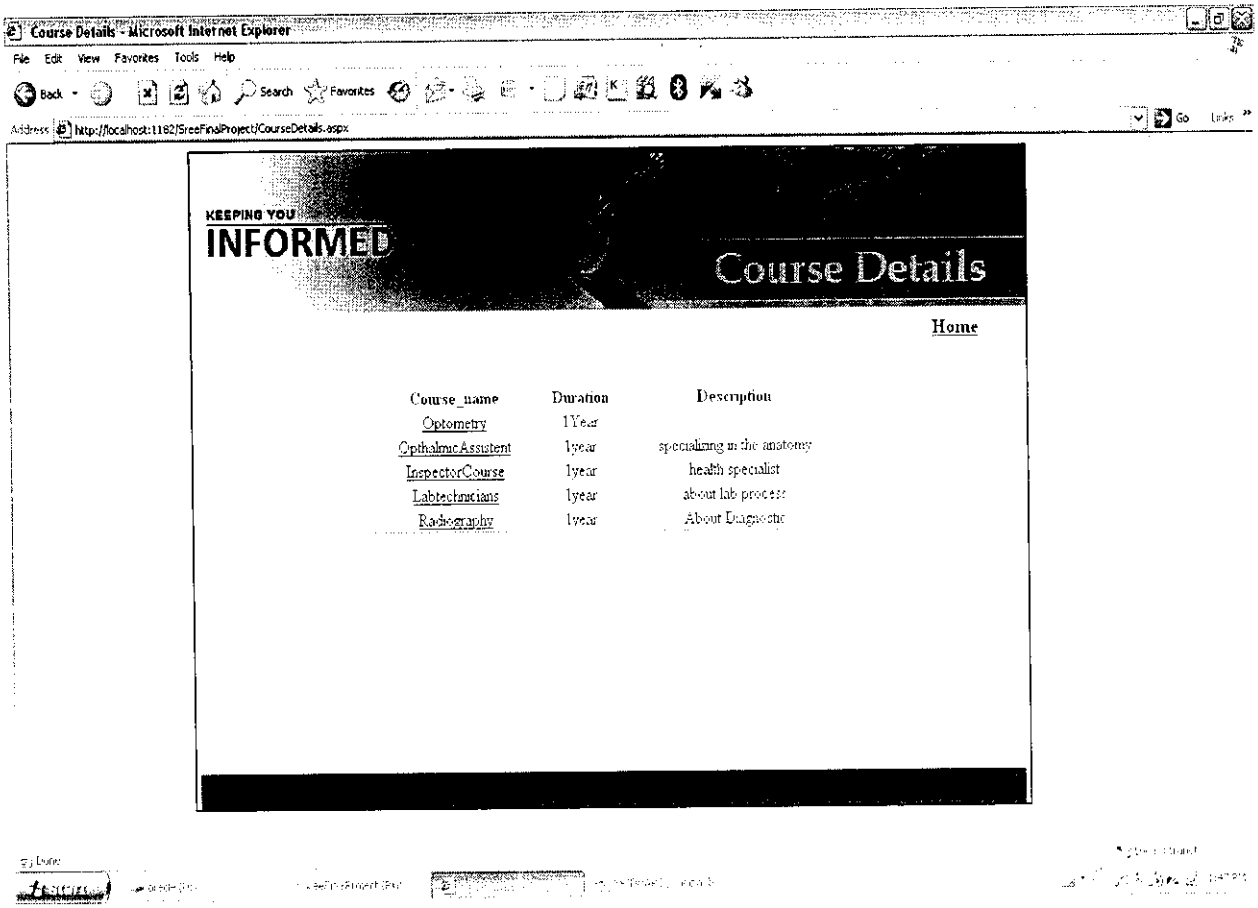
Login Page:


Content Management - Windows Internet Explorer
http://localhost:1042/SreeFinalProject/login.aspx
Content Management
KEEPING YOU
Informed
INFORMED CONNECTICUT PHYSICIAN UPDATE
Home
Courses
Registration
About Us
Contact Us
Online Exam
Log In
User Name: admin
Password:
Remember me next time
We would like to thank you for your consideration of this Continuing Medical Education activity for meeting your state licensing requirements. This activity provides you the most straightforward method to satisfy all CME requirements for license renewal from the Connecticut Department of Health.
Content Management...

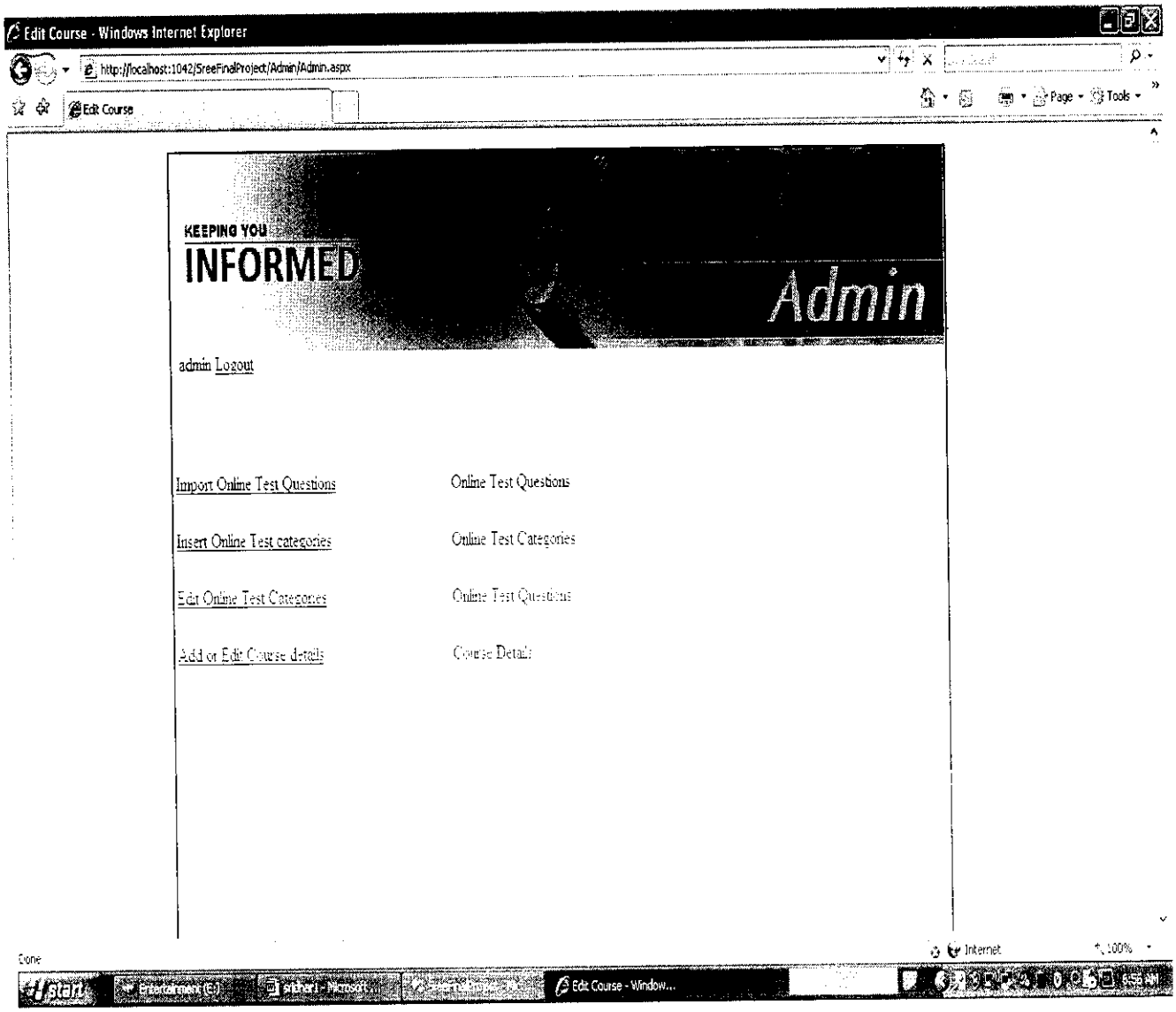
Registration page:



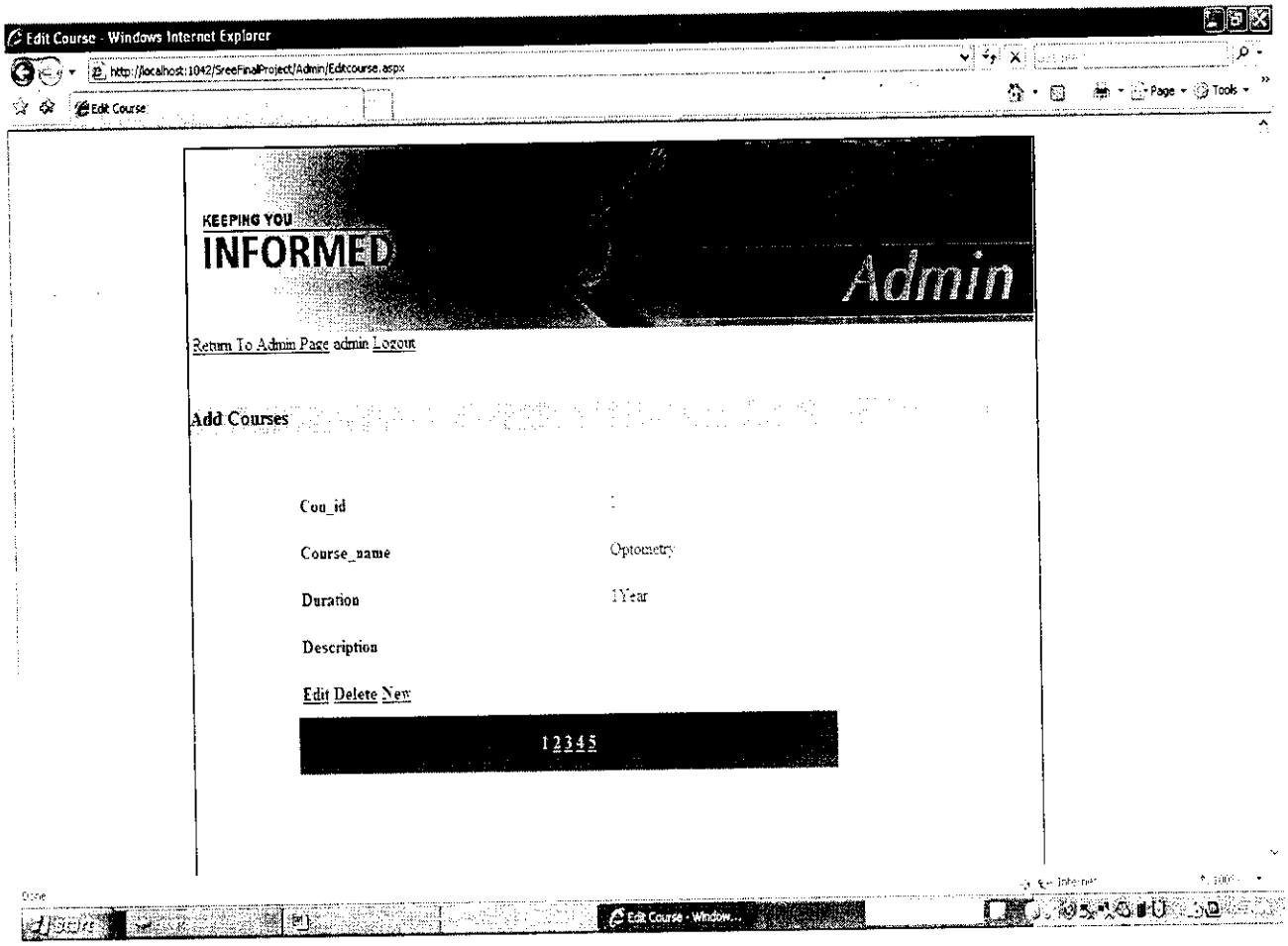
Course Details Page:



Admin Page:


Edit Course - Windows Internet Explorer
http://localhost:1042/SreeFinalProject/Admin/Admin.aspx
Edit Course
Page
Tools
KEEPING YOU
INFORMED
Admin
admin Logout
Import Online Test Questions
Online Test Questions
Insert Online Test categories
Online Test Categories
Edit Online Test Categories
Online Test Questions
Add or Edit Course details
Course Details
Done
Internet
100%
start
Edit Course - Window...

Add Course Details Page



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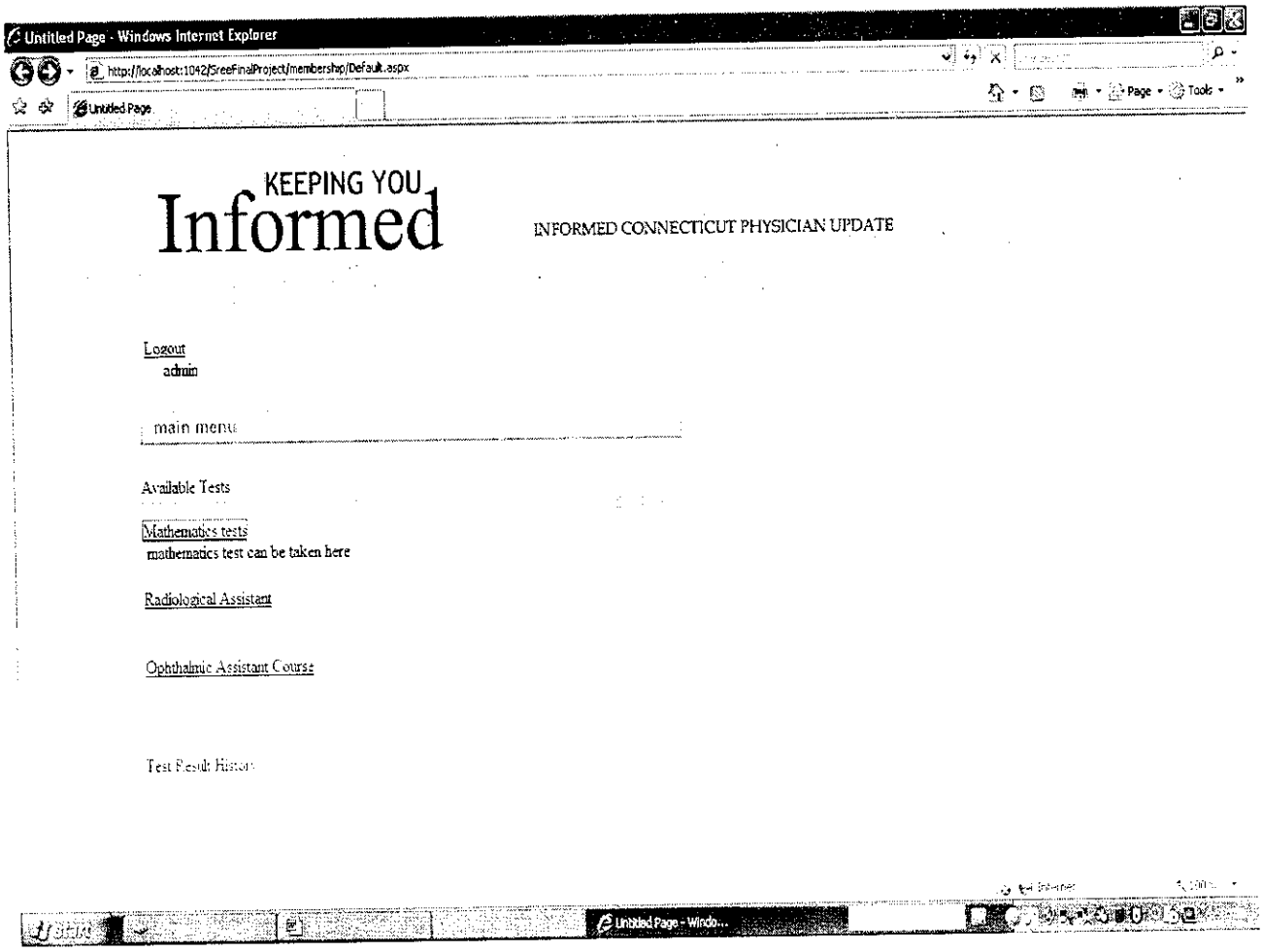
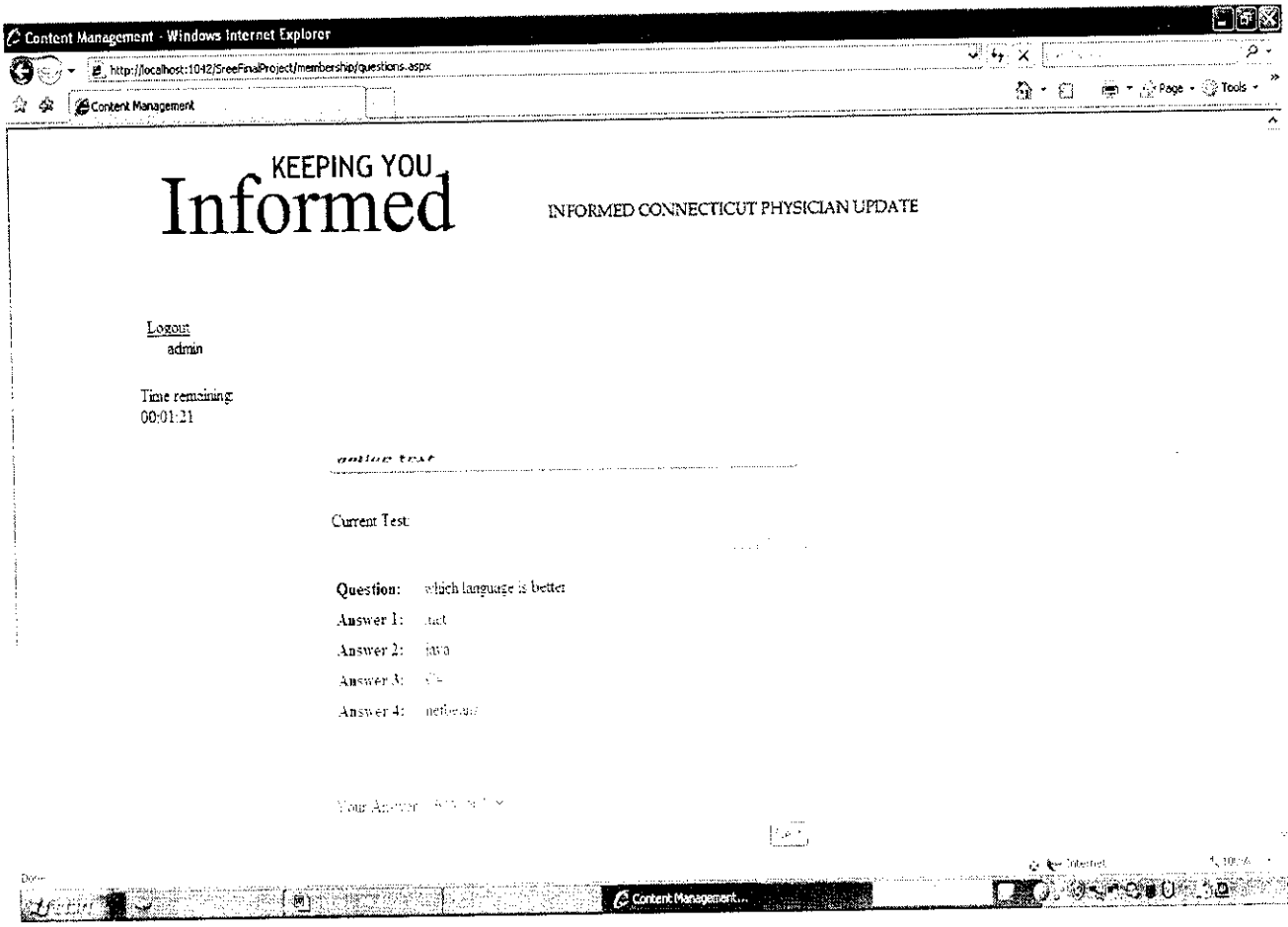
Available Courses:



Online Exam Page:



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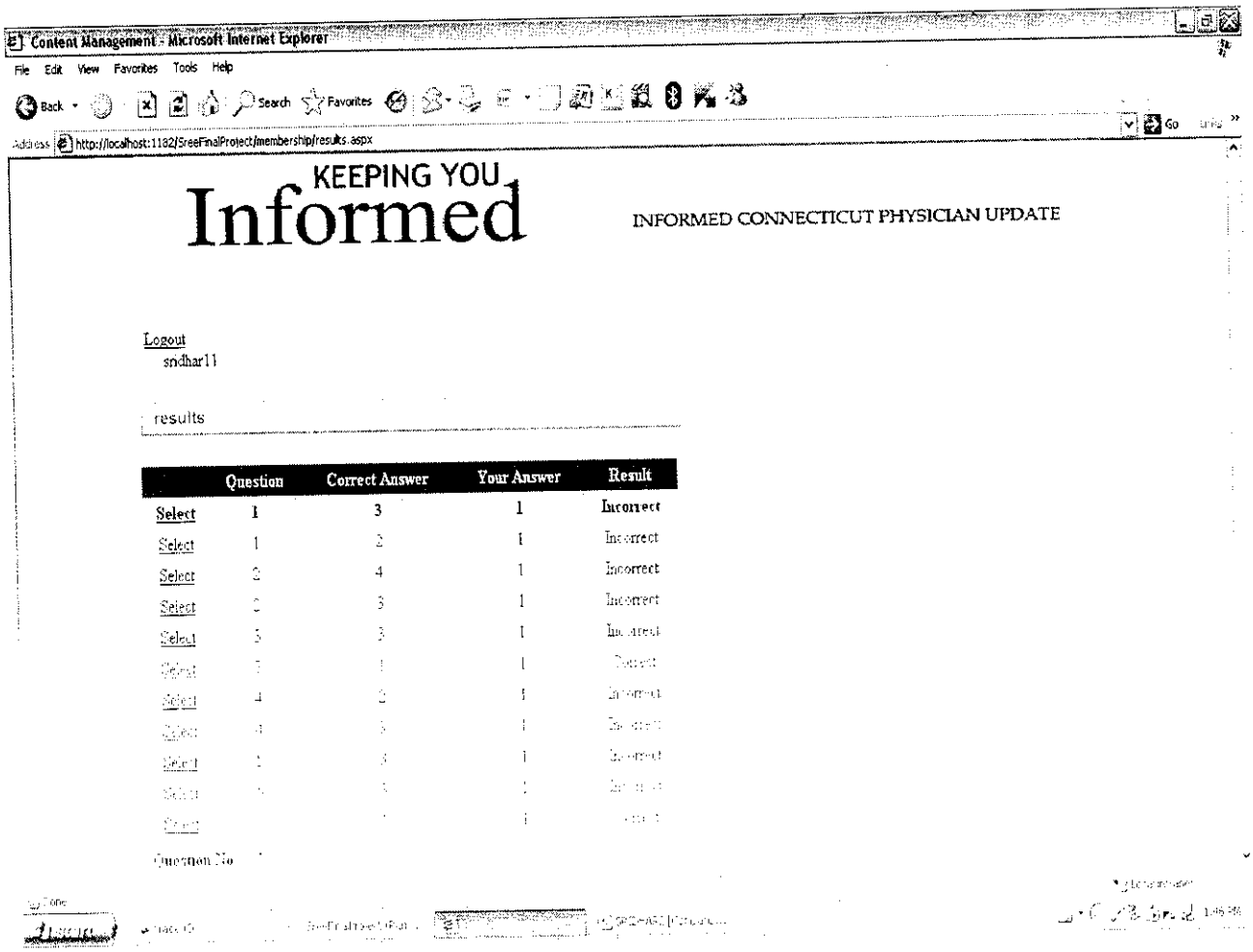

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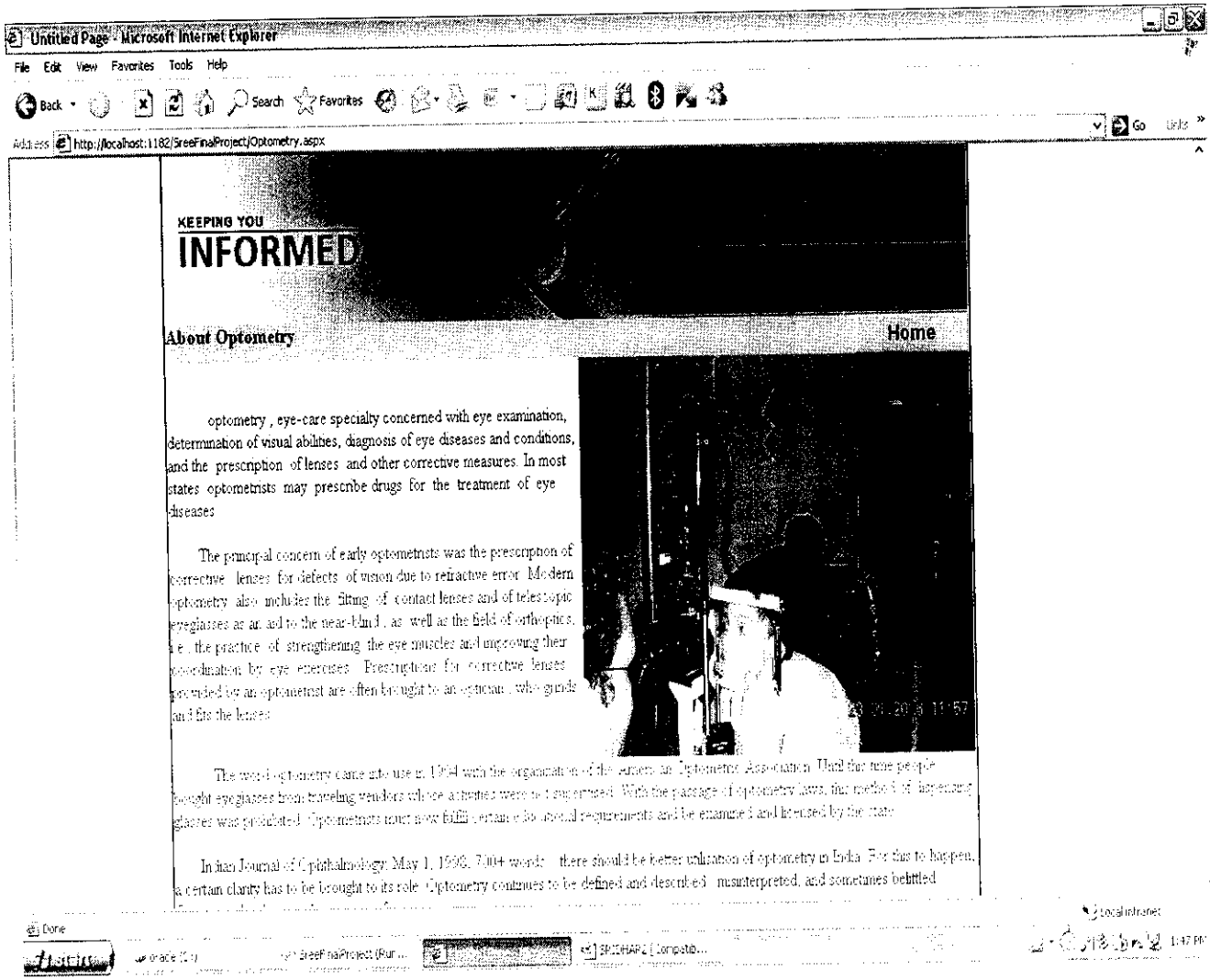

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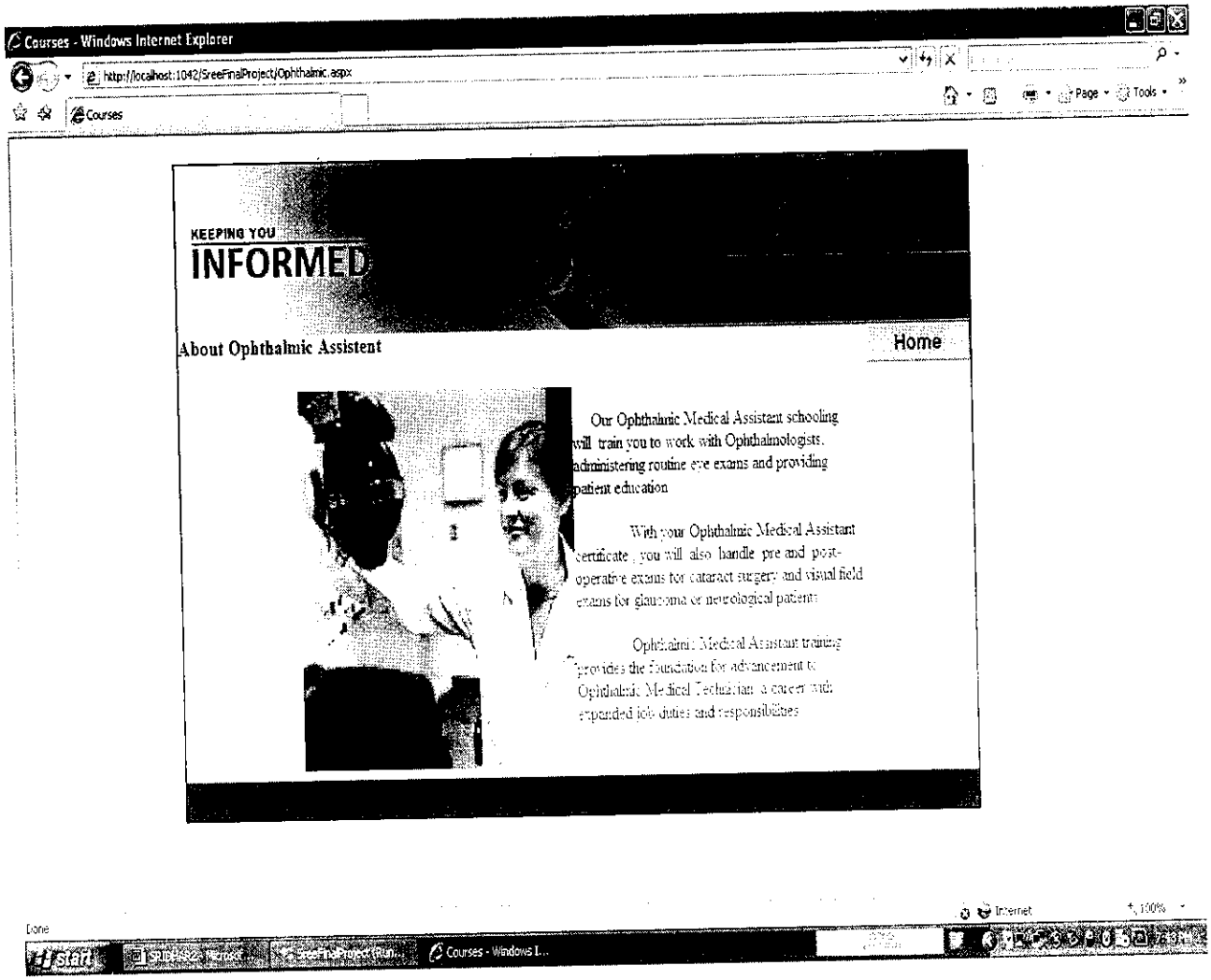

CHAPTER-9

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