ITIS 5166 – Network Based Application Development

University of North Carolina at Charlotte

Online Course Registration System

Project Report

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1)Project Overview:

An Online Course Registration system is to be developed with a front-end web interface and a back-end database. An example of the system would be University of North Carolina’s Course Registration website. Any database system can be chosen as the back-end such as Oracle, MySQL, Microsoft SQL Server, DB2, Access. In this project, I have chosen MYSQL as my database system. Any web server can be chosen for the front end such as Tomcat, Glassfish, JRun, etc. The web server I have chosen for this project is Tomcat. Server side language used in this project is JSP. The purpose of implementing this project is to understand the Java web application concepts that is used in a real-time scenario and to implement a fully functional database system which interacts with a front-end interface.

A high-level description of the project.

* Role table consists of two attributes namely roleId and rolename. RoleId ‘1’ indicates admin and roleId ‘2’ is for students.
* Each user has a unique useId and a profile. The profile includes Username, Password, roleId.
* Each professor has a unique profId and a profile. The profile must indicate the professor’s name and department.
* Each course has a courseId, courseName and a profId.
* A department has a unique deptId, and a deptname.

2)Site Map:



3)Page Design:

1.LOGIN

* **Name of the page:** Index
* **Purpose of the page:** Login is a functionality implemented for any both admin and students.
* **Audience of page:** Both student and admin can view the page.
* **Data:** The fields in this page are Username and Password. The values given in this fields are carried while navigating to other pages.
* **Validations:** The values given in username and password field should be validated with the database. If the values given exists in the database.

**Buttons:** Login and Sign Up buttons are present in this page. When Login button is clicked, the values in username and password field are taken to next page. When Sign Up button is clicked, it will be directed to the register page.

2.Admin LOGIN

a) Add Courses:

* **Name of the page:** Course
* **Purpose of the page:** Add Courses is a functionality implemented by the admin to add courses.
* **Audience of page:** Admin can view the page.
* **Data:** The fields in this page are Coursename, ProfessorId, Professorname and DepartmentId. The values given in this fields are carried while navigating to other pages
* **Validations:** The values given in the above field should be validated with the database. If the values given exists in the database

**Buttons:** Add and Back buttons are present in this page. When Add button is clicked, the courses selected are added. When Back button is clicked, it will be directed to the back page.

b) Add Professor:

* **Name of the page:** Professor
* **Purpose of the page:** Add Professor is a functionality implemented by the admin to add professors.
* **Audience of page:** Only admin can view the page.
* **Data:** The fields in this page are Professorname and DepartmentId. The values given in this fields are carried while navigating to other pages
* **Validations:** The values given in the above field should be validated with the database. If the values given exists in the database

**Buttons:** AddProfessor and Back buttons are present in this page. When AddProfessor button is clicked, the professors selected are added. When Back button is clicked, it will be directed to the back page.

c) View Courses:

* **Name of the page:** Viewcourse
* **Purpose of the page:** Viewcourse is a functionality implemented by the admin to view added courses.
* **Audience of page:** Both student and admin can view the page.
* **Data:** The fields in this page are CourseId, Coursename and ProfessorId. The values given in this fields are carried while navigating to other pages.
* **Validations:** The values given in the above field should be validated with the database. If the values given exists in the database.

**Buttons:** Back button is present in this page. When Back button is clicked, it will be directed to the back page.

3.USER LOGIN

a) View Courses:

* **Name of the page:** Viewcourse
* **Purpose of the page:** This page allows the user to view added courses by the admin.
* **Audience of page:** Both student and admin can view the page.
* **Data:** The fields in this page are CourseId, Coursename and ProfessorId. The values given in this fields are carried while navigating to other pages.
* **Validations:** The values given in the above field should be validated with the database. If the values given exists in the database.

**Buttons:** Back button is present in this page. When Back button is clicked, it will be directed to the back page.

b) Add Courses:

* **Name of the page:** Add Courses
* **Purpose of the page:** This page allows the user to add courses.
* **Audience of page:** Student can view the page.
* **Data:** The fields in this page are Coursename, ProfessorId, Professorname and DepartmentId. The values given in this fields are carried while navigating to other pages.
* **Validations:** The values given in the above field should validated with the database. If the values given exists in the database.

**Buttons:** Add and Back buttons are present in this page. When Add button is clicked, the courses selected are added. When Back button is clicked, it will be directed to the back page.

c) My courses:

* **Name of the page:** My Courses
* **Purpose of the page:** This page allows the user to view added courses.
* **Audience of page:** Both student and admin can view the page.
* **Data:** The fields in this page are Coursename, CourseId, ProfessorId, Professorname and DepartmentId. The values given in this fields are carried while navigating to other pages.
* **Validations:** The values given in the above field should validated be with the database. If the values given exists in the database.

**Buttons:** Back button is present in this page. When Back button is clicked, it will be directed to the home page of student.

4)ER Diagram of MySQL database designed:

