**PROJECT REPORT**

**WEB COMPONENT DEVELOPMENT WITH SERVLETS AND JSP TECHNOLOGIES PROJECT**

**PROJECT NAME:***FASTLEARN DISTANCE EDUCATION SYSTEM*

**SUBMITTED BY:***DEEPA GOPALARATHNAM*

**STUDENT ID: S101113401227**

**DATE OF SUBMISSION: 27 February 2011**

**PROJECT TOPIC OUTLINE SUGGESTED BY NIIT PROJECT CURRICULUM**

**FASTLEARN ONLINE DISTANCE EDUCATION SYSTEM**

**BATCH CODE:**

**START DATE: February 18,2011**

**END DATE: March 2, 2011**

**NAME OF THE COORDINATOR: MR.N.RAVI**

**NAME OF THE DEVELOPER: DEEPA GOPALARATHNAM**

**DATE OF SUBMISSION:February 28, 2011**

**ACKNOWLEDGEMENT**

**I have benefitted a lot from the feedback and suggestions given to me by Mr.Ravi,our teaching faculty for this course.**

**I hereby take this opportunity to add that this project work has been an original attempt by me to emobodify the requirements of the FASTLEARN ONLINE DISTANCE EDUCATION SYSTEM, as mentioned in the ‘Web Componenet Development with Servlets and JSP Technologies Project Student Guide’-the project book prescribed by NIIT Pvt. Ltd, for aspiring learners of J2ee Technologies.**

**Thanking you,**

**Sincerely,**

**Deepa Gopalarathnam**

**SYSTEM ANALYSIS**

**System Summary:**The FASTLEARN ONLINE DISTANCE EDUCATION PROJECT caters to three different types of users, namely students, faculty and administrators.

The website allows the student user to:

* View Course Information
* Post Queries
* Send Feedback
* Change Password

The faculty user can:

* Answer Queries
* View Course Information
* Change Password

The administrator can:

* Manage course information
* Manage faculty information
* Manage study center information
* Manage student information
* View feedback
* Change password

Software Design:

This has been based on the 3 tier architecture platform with an underlying MVC pattern.

The view package contains the servlets that belong to the presentation layer, in addition to the jsp pages that are created in the “Web Pages” folder of the Netebans IDE module package

The model package deals with the database connections

The controller package deals with redirection of control to view or model as deemed appropriate

\*However, due to the potential disadvantage of the Servlets Technologies,in which it is not possible to actually separate out the HTML from the java code, the MVC patterns could not be implemented on strict margins and hence, a programmer can find some of the view type servlets in model, controller and such like.

This loose marginalization must be excused.

**Hardware and Software Requirements**:

Hardware: Intel Core Duo CPU(1.83gHz),1.99GB of RAM,150 GB Hard disk

Operating System: Windows XP Professional

Software: JDK 6.1 with Netbeans 6.9.1,Derby Database from Sun Java Application Server

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Serial No. | Activity Description | Planned Date of  Completion | Actual Date | Responsibility | Remarks |
| 1 | Creating the login page and its authentication | 20 February 2011 | 20 Febraury 2011 | Deepa Gopalarathnam |  |
| 2 | Creating the Student Menu home page and its associated pages | 21 February 2011 | 22 February 2011 | Deepa Gopalarathnam | Had to figure out the change password option and selective update of query table  Delay cascaded!  Had to create the update,  add and  delete for each of the four tables:course, faculty,  student and studycenter |
| 3 | Creating the Faculty Home Page | 22 February 2011 | 23 February 2011 | Deepa Gopalarathnam |
| 4 | Creating the admin pages | 23 February 2011 | 27 February 2011 | Deepa Gopalarathnam |

SEQUENCE DIAGRAM FOR CHANGING A PASSWORD

DATE OF SUBMISSION: 27 FEB 2011

4.database returns the successful insertion or failiure to the controller which is forwarded to the user on a web page by the controller servlet.

USER

CONTROLLER

FASTLEARN DATABASE

1.Enter new password and confirm it by reentering new password

2.IF new\_password & confirm-newpassword do not match, return to user

3.if all ok, submit to database

DIAGRAM FOR ADDING,INSERTING,DELETING STUDENT,COURSE,STUDYCENTER OR FACULTY FROM THE CORRESPONDING TABLES

DIAGRAM FOR QUERYING BY STUDENT AND ANSWERING OF QUERIES BY FACULTY

PROJECT LIMITATIONS:

1. Database Entity relationships have been established successfully, but the foreign key values failed to be captured when implemented as drop-down menu in forms.Hence the user has to manually key-in values in forms after looking up the corresponding foreign key values
2. Only one faculty can be assigned for one course according to the current database schema, otherwise, one faculty must have multiple different logins to teach multiple courses.
3. A delete in any of the primary key values shall result in the cascading effect of the entire row of information in corresponding foreign key tables to be deleted.

PROJECT ADVANTAGES:

* A sincere attempt has been made to completely automate the entire scenario
* The drawbacks mentioned can be overcome in a much broader time frame
* Makes use completely of the Servlets and JSP Technology providing good exposure and experimentation to the student
* Gives a feel of the real-time project development scenario.

THANK YOU!