

Internet Technology CPT301 Assignment

Weight: 40%

Due Date: 22 October 2015

Objectives

The objectives of the assignment are to test the knowledge of the student in;

1. Planning a website
2. Creating and optimizing images for web
3. Using XHTML in creating web pages
4. Using CSS to style web pages
5. Using JavaScript for form validation
6. Server-side programming
7. Manipulating a database

Requirements

You have been hired as a web applications developer for Maldives National University (MNU). MNU has assigned you the task of creating a Subject Reservation System (SRS) for Faculty of Science (FS) to smoothen student enrolment process. The basic requirements of the application are;

Student Panel

Any student registered as a FS student should be able to perform the following functions using the student panel.

1. Registration and Login
 - a. Students who do not have an SRS account should be able to register. Only students registered as FS students should be allowed to create a SRS account. You may assume that all registered MNU students data is available for you. Hence, you do not need to show student registration process of MNU.
 - b. Only SRS users should be able to view their accounts. They must not be allowed to access others accounts.
 - c. A SRS user should be given three attempts to login in to the system. Upon three unsuccessful log in attempts, the account should be locked.
2. Profile Management
 - a. A SRS user should be able to update their profile. Only certain fields of your choice should be updatable. However, the updatable fields should be reasonable.
 - b. A SRS user should be able to change their password. The password should have at least 8 characters and should contain letters, numbers and special characters.
3. Enrolment
 - a. A SRS user should be able to view subjects which they are eligible to enrol for.
 - b. A SRS user should be able to enrol at most four subjects per semester. Some subjects may have an entry criterion. For example, to enrol for the subject “Advanced Programming” the SRS user must have completed “Introduction to Programming”.
 - c. A SRS user should be able to edit or cancel enrolments for which the enrolment deadline has not been reached or for which the enrolment has not been approved.
 - d. View enrolment status messages.
4. Searching
 - a. A SRS user should be able to view their enrolment status and they should be able to search for enrolment history using a date range.

Admin Panel

An administrative user should be able to log in and use the administrative functions of the panel. The administrative function includes;

5. Account Management
 - a. A student needs to be registered as an FS student for them to be able to create a SRS user account.
 - b. View SRS user account creation requests and either accept or reject the request.
 - c. Unlock locked SRS user accounts.
 - d. Disable and enable SRS user accounts.
6. Manage Enrolment
 - a. Add subjects for enrolment. Some subjects may have an entry criterion.
 - b. Edit and delete subjects.
 - c. Approve or reject enrolment requests. The rejection can be based on payment status or some other factor which is not directly related to the system. Hence, you may assume the reasons.
 - d. Allow students to request for enrolment. The duration for enrolment should be predefined.
 - e. Send messages to students informing them of their enrolment status.
7. Report Generation
 - a. Generate reports of students along with subjects they enrolled for.
 - b. Export the students list along with the subjects they enrolled for in to a text file.

Other than the requirements given above you should also consider the following when developing the web application.

8. Miscellaneous
 - a. Navigation: Site Map
 - b. Usability: Readability, contrast
 - c. Layout & Images: Consistency, good contrast, quality of images, overall impression
 - d. Form validation
 - e. Appropriate naming of variables
 - f. Proper commenting

Deliverables

The following items should be submitted online using the Science Learning Platform.

- Fully commented source code including all the resources such as graphics.

Further, you should ensure that the submitted files are not corrupted.

Marking Criteria

The following is the general marking guide that will be used. This should give you an idea of how to manage your time and effort. It also indicates how to prioritize the different aspects of the assignment.

Criteria	Requirements	1	2	3	4	5	6	7	8
	Marks Allocated	10	10	15	10	10	15	10	20
Attempted to implement the features	1% - 25%								
Basic level of implementation of the features	26% - 50%								
Satisfactory level of implementation of the features	51% - 80%								
Flawless level of implementation of the features	81% - 100%								