DT282 & DT211C

WEB DEVELOPMENT & DEPLOYMENT

PAIR PROJECT

Create a pair of students within your lab group and email diana.ferreira@dit.ie or cindy.liu@dit.ie with your names and student numbers, by **29/09/17**. Set up a private Git repository[1] and add your lab instructor as collaborator (dianaferreiraDIT or ask for Cindy's).

Develop a web application that interacts with a MySQL database via PHP and that includes an authentication mechanism. The application has to implement the 4 CRUD operations (Create/Read/Update/Delete).

An example is a book library application, with a pre-populated DB, that allows users to:

- Register: create, read, update or delete a profile with personal information, including a profile picture and password management (change, recovery)
- Log in and log out
- search for books that match certain criteria (e.g. publication year, title or author containing a word)
- see details of the search results
- filter the search results
- add books to a personal area (e.g. "My Books")
- only logged in users can add books to the personal area
- any user can search for books and see the results.

You are free to choose the exact application, but consider the required components in the marking scheme below.

Students are not allowed to share their own code outside their group. Any external code snippets, libraries or frameworks used must be properly acknowledged (for example with comments in the code). Remember the policy on plagiarism – facilitators and perpetrators, both get zero.

Submit your project in a compressed ZIP folder via webcourses by **23:59 on 16/11/17**.
Include the XAMPP deployment folder, an SQL dump of the database and a readme.txt with configuration and deployment information. One submission per group is enough, but make sure there is one.
Late submissions not accepted.

[1] Get free private repos on https://education.github.com/pack

Mandatory demos on 17/11/17 and 24/11/17.
Individual discussion of contributions, understanding of whole solution. Individual discussion mark as a multiplier of the overall project mark.

For example: Project mark = 50
Discussion mark (student A) = 80%
Discussion mark (student B) = 100%
Final result, student A = 50*80% = 40%
Final result, student B = 50*100% = 50%

This project is worth 75% of module marks. Each category of the marking scheme below is assessed in terms of attempt/poor/sufficient/good/excellent.

Functionality:

Authentication and Personal vs Public areas – 10 marks

CRUD operations with MySQL including profile management – 10 marks

Advanced Search and Filter mechanism – 5 marks

Validation of inputs (from forms) – 5 marks

Upload mechanism (for files) – 5 marks

Asynchronous communication (AJAX, with DB, JSON or XML file) – 5 marks

Usability/User Experience:

Communication with the User (error messages, etc.) – 5 marks

jQuery (for animations) – 5 marks

Bootstrap (for visuals) – 5 marks

Code Quality/Security:

MVC design pattern – 5 marks

DRY principle – 5 marks

Prepared Statements (to avoid SQL injection) – 5 marks

Documentation

Deployment instructions (readme.txt) – 5 marks

Please contact the lecturer in case any aspect of this assignment is not clear to you. Have fun!