BSc Final Year Project Form (2015/2016)

1. Proposal
The student should complete parts 1(a), 1(b) and 1(c) below, and then agree the maximum pocket values with the supervisor and put these in part 2(a) below. An electronic version of this form should be uploaded to the Final Year Project page on Moodle no later than Monday 2nd November 2013.

(a) Student details

<table>
<thead>
<tr>
<th>Name:</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email:</td>
<td>Project BSc Computing - Type 3 (BUCI026S6)</td>
</tr>
</tbody>
</table>

(b) Project details

Title:
Aviation Database Website

Objectives:
- Requirements capture and design of an Information System “Aviation Database Website”.
- Create a website prototype featuring a PHP Framework (CakePHP) and a MySQL Database.
- Implement a logic that would allow users to vote photos uploaded by other members.
- Implement a logic that would not allow users to vote for their own photos. Also, they would be able to vote for other photos only once (IP address is detected)

Description:
This project includes the requirements capture and design of an Information System “Aviation Database Website”. It is a website, locally installed, similar to www.planespotters.net. This website prototype aims to elaborate airplanes data stored in a database.
The main difference between this project and Planespotter, is that on the latter, a dedicated team would review the photos submitted by the users, and consequently approve or reject them. The current project features an automated system where the photos are voted by the visitors, and approved or rejected in base of the score received.

Method:
- The website is created locally by using the following technologies:
  - PHP (framework: CakePHP)
  - MySQL database
  - MAMP – Apache, MySQL and PHP server installed on a MacBook machine
The prototype is limited to one airline only (British Airways)
Anyone can vote – the user’s IP address is detected, and multiple votes on the same photo from the same visitor are not allowed
Details for BA Airplanes are stored in the MySQL database:
  1. c/n (construction number)
  2. Aircraft type
  3. Registration code
  4. Delivery date
  5. 20 photos per airplane (converted and stored as Binary Large OBject – BLOB)
The main focus of this prototype is the PHP logic ‘behind the scenes’ and the interaction with the MySQL database. For this reason, the front-end part (e.g. how the website looks) is not going to be the main goal of this project.

Work plan:

<table>
<thead>
<tr>
<th>Task</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Specifications approval and submission of the Proposal Form</td>
<td>By the end of October 2015</td>
</tr>
<tr>
<td>Initial set up:</td>
<td></td>
</tr>
<tr>
<td>1. Installation and configuration of the MAMP server</td>
<td>By the end of December 2015</td>
</tr>
<tr>
<td>2. PHP Framework and Database installation and configuration</td>
<td></td>
</tr>
<tr>
<td>3. New website project set up</td>
<td></td>
</tr>
<tr>
<td>Front-end interface set-up</td>
<td>By the end of January 2016</td>
</tr>
<tr>
<td>Back end set-up and logic implementation</td>
<td>By the end of March 2016</td>
</tr>
</tbody>
</table>

The report will be carried out at the same time as the technical part progresses.

College equipment required:
None – the project is going to be developed on my personal laptop.