**Project Ideas**

**for**

**MSc Students**

**Requirements Specification**

**By**

**UP687776**

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# **Introduction**

The School of Computing currently has a website for MSc students to submit projects ideas with very limited functionality and possibility of few bugs.

This document focus on gathering and listing the requirements need to create this web application.

## **Purpose**

The purpose of this document is to provide detailed description of requirement specifications for “Project Idea for MSc Students” software.

## **Aim**

Aim is to develop an MVC-style web application system for Master students which will provide suggestion to student for their potential MSc project. The ideas will be suggested by a lecturer or member of staff. Not only students will be able to ‘search’ and ‘select’ suggested ideas. But students will be given an opportunity to suggest and submit their own ideas as well as change/withdraw or remove them. This new purposed solution aim to enhance the existing system ‘SUM’

(<http://www.sums.port.ac.uk/spi/>).

## **Key Personnel**

Product Owner: Professor Jim Briggs (School of Computing)

([jim.briggs@port.ac.uk](mailto:jim.briggs@port.ac.uk))

Design Authority: UP687776

([up687776@myport.ac.uk)](mailto:up687776@myport.ac.uk))

Development Team: UP687776

([up687776@myport.ac.uk)](mailto:up687776@myport.ac.uk))

## **Future Proofing**

This is designed to focus on MSc students but there could be possibility in future that it could evolve and allow undergraduate as well as PHD students pick and suggest different ideas.

## **Rationale for Development**

The new system will be built using MVC-style pattern which will make it more scalable and maintainable. Oppose to right now which doesn’t have MVC style.

The current searching functionality is very limited and doesn’t now allow user to search in wider scope. New and improved searching functionality will be added

Students are not allowed to change/edit or delete/withdraw their ideas once submitted

It has limited functionality capability and does not allow any students to change or remove project idea once it’s submitted.

The new system will be developed using Java EE, MySQL, Ajax technologies and Apache and Maven server.

## **Project Approach**

This project will be following Prototype methodology technique. When working on this project my prototype design, development and testing cycle is going to overlap each other due to complexity of the project. For me to create a prototype some design and development will need to be done at same time to create functionality and get feedback on regular basis.

## **Timetable**

|  |  |
| --- | --- |
| **Dates** | **Deliverable(s)** |
| 03/02/2017 | * First Draft of Requirements Specifications |
| 17/02/2017 | * First Draft of User Interface Design |
| 10/03/2017 | * Alpha Version of Application (Mandatory) |
| 27/03/2017 | * Demonstrable Web Application (Mandatory) * Complete Documentation * Source Code Listings and JavaDocs * Report on Coursework |
| 31/03/2017 | * Peer Review |

# **System Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Functionality** | **Priority** | **Status** |
|  | **Registering to System (Login System)**  A user must be able to create new accounts by providing the following information.  **Administrator**  The details should include the followings:   1. Name 2. Email Address 3. Username (unique to all users)   Password (not displayed to a user, must consist of at least 8 characters)   1. Status of Privileges     **Tutor/Staff**  The details should include the followings:   1. Name 2. Email Address 3. Username (unique to all users)   Password (not displayed to a user, must consist of at least 8 characters)  **Students**  The details of students should include the followings:   1. Name 2. Email Address 3. Username (unique to all users)   Password (not displayed to a user, must consist of at least 8 characters) | High  High  High  High | Completed |
|  | **Users of System**  **Registered Users**   1. A user must be able to create new user account by providing the information (see No. 2) 2. Unregistered User will have least and limited access to features of the system. 3. Registered Users (Students) will have access to more features including adding, editing, withdrawing from project idea as well as selecting idea provided by number of staff. However, they will not have access to change any other content. 4. Registered Users (Staff) will have must privileges including adding, removing idea as well as changing the student project idea status. 5. Registered Users (Administrator) will have most privileges and will have complete access to all features of the system | High  High  Medium  High  High | Completed |
|  | **Administrator Rights**   1. Administrator can create new administrator users      1. Administrator can create or delete new users | High | Completed |
|  | **Searching Submitted Idea**  Any users including registered and unregistered will be able to search through different ideas. The searching functionality will allow user to search project idea by providing any of the following (title, description, tutor name, programming language type). | Low  High | Completed |
|  | **Form to submit Idea**  User will be able to add title, description, preferred tutor, preferred language. | High | Completed |
|  | **Status System**  Staff or Administrator will have privilege to change the status of idea suggested by students. | Medium | Completed |
|  | **Contacting the Administrator**  A User will be able to contact the administrator regarding any enquiries like username, password or any issue. | Low | Completed |
|  | **Student can submit project Ideas to be approved**  When a student applies for a project, the project will automatically be assigned to an ‘**unassigned’** user for a member of staff to review and approve the idea | High | Completed |

# **Collecting Data**

The system will be collecting data from various source using ‘Forms’;

see following table

|  |  |
| --- | --- |
| **Dates** | **Deliverable(s)** |
| Students | * Need to Register using forms provided on the system |
| Staff | * Need to Register using forms provided on the system |
| Idea | * Need to added and edit their idea using form, available to staff and students (with limited rights) |
|  |  |

All of those will be added into the database.

# **Version Control**

The plan in to use GitHub to keep data backed up and source code version control. This will help keep track of the system and code. Any changes made to the system will be recorded in GitHub repository.

# **Document Version History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Changer** | **Changes** |
| v1 | 31th January 2017 | UP687776 | Project Initiation Document |
| V2 | 27th of March 2017 | UP687776 | Updated Requirements |

# **Reference:**

1. <http://briggs.myweb.port.ac.uk/WEBP/ENTWA/2016-2017/cwk.htm>
2. <http://briggs.myweb.port.ac.uk/WEBP/notes/examples/SofaReqSpec.htm#_Toc91402378>
3. <http://www.cse.chalmers.se/~feldt/courses/reqeng/examples/srs_example_2010_group2.pdf>