

# **Initial Plan**

## **Project 118 – ‘Electronic Map of COMSC’**

**By Melissa Whiting, C1432295**

### **Module Information:**

**Title: One Semester Individual Project**

**Number: CM3203**

**Credits: 40**

### **Supervision:**

**Supervisor: Helen R Phillips**

**Moderator: Pdraig Corcoran**

## Project Description

The school of Computer Science and Informatics is located within the Queen's Building on The Parade, which is just off Newport Road. The Queen's Building has many levels and different buildings, meaning that some students and some members of faculty can struggle to find their way around the campus effectively. Students with disabilities can find navigating around the building even more challenging. It should be noted that paper maps are not really an option due to the various levels within the building.

I have been asked to carry out a feasibility study in order to determine if it would be possible to create some application that can help students and staff navigate the building more effectively. Due to the time constraints of the project, I will only have time to carry out a feasibility study on two potential solutions. These solutions are:

- Creating my own mobile application that uses beacon technology in order to accurately find a users location within the building
- Creating a social media 'chat-bot' that users can interact with and ask for directions to different locations within the building (through use of messages, pictures etc).

I will then attempt to produce a prototype to test the possibility of such an application.

## Project Aims and Objectives

Below are a list of the aims and objectives for my project:

- **Understand the problem**
  - Carry out research into existing applications that solve the problem
  - Carry out an analysis on the current solution to the problem at university
- **Identify and carry out a feasibility study on two separate potential solutions in order to determine the most feasible solution to the problem**
- **Carry out a survey**
  - Should help to determine how bad the problem is
  - Should give insight into how others see the problem being solved
- **Carry out implementation of a prototype of the most feasible solution**
  - Research how to implement the solution
  - Determine system requirements etc
- **Create and carry out user testing to determine how well the solution solves the problem**
- **Produce a final report that details the findings of my project**

At the end of this project I aim to have the following deliverables:

- Prototype of an application that aims to solve the problem of navigation within the Queen’s Building
- A final report that contains a feasibility study which investigates two potential solutions to the problem, as well as the overall findings of my project

## Ethics

After reading ‘*Ethical Approval of Research: Procedures and Guidance*’<sup>[1]</sup> and finding out that all non-clinical research involving human data is subject to ethical approval, I have determined that I will need to gain ethical approval in order to carry out a survey as part of my research. The survey will ask questions regarding how people currently find their way around the building, including those with disabilities, and the challenges they face. I will be applying to the universities’ Research Ethics Committee in order to gain ethical approval for my research. In order to submit an application for ethical approval I will also be sitting an online module titled ‘*Research Ethics 1: Research Governance*’<sup>[2]</sup>, which covers details regarding the universities’ ethics practise.

## Work Plan

Below is a table that details my work plan for the duration of my project. Although not mentioned in my work plan, I will also have weekly meetings with my supervisor to discuss project progress. The work plan contains key tasks that I will be carrying out each week, dates for review meetings with my supervisor and clear milestones that I must reach to ensure that the project will be completed on time:

Week	Dates	Task
1	23/01/2017 – 29/01/2017	<p><b>Start writing my initial plan and do some background reading</b></p> <p><b>Meet with my supervisor in order to discuss the direction of the project and to finalise project aims</b></p> <p><b>Finish and submit my initial report</b></p> <p><b>Complete the online module ‘Research Ethics 1: Research Governance’</b></p> <p><b>Complete and submit Ethical Approval Form for review</b></p>
<b>MILESTONE – COMPLETE AND SUBMIT INITIAL PLAN, COMPLETE ONLINE MODULE,</b>		

<b>COMPLETE AND SUBMIT ETHICAL APPROVAL FORM</b>		
<b>2</b>	<b>30/01/2017 – 05/02/2017</b>	<p><b>Research and analysis of existing applications that solve the problem</b></p> <p><b>Evaluate current solution to problem at university</b></p> <p><b>Include in my report: a discussion of the problem, important details about my research and analysis into existing applications and my evaluation of the current solution to the problem at university</b></p>
<b>3</b>	<b>06/02/2017 – 12/02/2017</b>	<p><b>Determine potential solutions to problem</b></p> <p><b>Create a survey and get people to complete it about how they see the problem and potential solutions</b></p> <p><b>Include in my report: details about the potential solutions I will investigate further, details about ethical considerations for creating and carrying out a survey, as well as a discussion about the findings of my survey</b></p>
<b>MILESTONE – COMPLETE SURVEY AND ANALYSE RESULTS</b>		
<b>4</b>	<b>13/02/2017 – 19/02/2017</b>	<p><b>Start feasibility analysis – Idea One</b></p> <p><b>Include in my report: A feasibility study of my first idea</b></p>
<b>5</b>	<b>20/02/2017 – 26/02/2017</b>	<p><b>Start feasibility analysis – Idea Two</b></p> <p><b>Include in my report: A feasibility study of my second idea</b></p> <p><b>Review meeting one with supervisor to discuss the results of my survey and to choose the most feasible solution to carry on with</b></p>
<b>6</b>	<b>27/02/2017 – 05/03/2017</b>	<p><b>Choose most feasible idea to take forward</b></p> <p><b>Start research into implementation of solution</b></p>

		<p>Define design requirements etc</p> <p>Include in my report: clarification and justification of my most feasible idea, the design requirements for this idea, as well as research into the implementation of the solution</p>
<b>MILESTONE – CHOOSE MOST FEASIBLE SOLUTION TO IMPLEMENT</b>		
7	06/03/2017 – 12/03/2017	<p>Start implementation of solution</p> <p>Review meeting two with supervisor to discuss the implementation stage of my solution</p> <p>Include in my report: Any details about implementation that are important</p>
8	13/03/2017 – 19/03/2017	<p>Carry on with implementation and documentation</p> <p>Include in my report: Any details about implementation that are important</p>
9	20/03/2017 – 26/03/2017	<p>Carry on with implementation and documentation</p> <p>Include in my report: Any details about implementation that are important</p>
10	27/03/2017 – 02/04/2017	<p>Carry on with implementation and documentation</p> <p>Include in my report: Any details about implementation that are important</p>
11	03/04/2017 – 09/04/2017	<p>Carry on with implementation and documentation</p> <p>Finish implementation</p> <p>Include in my report: Any details about implementation that are important</p> <p>Review meeting three with supervisor to discuss the prototype of my solution and make last few tweaks</p>
<b>MILESTONE – COMPLETE IMPLEMENTATION OF SOLUTION</b>		

<b>EASTER</b>	<b>10/04/2017 – 16/04/2017</b>	<b>Create and carry out user testing</b>  <b>Include in my report: details about the types of testing I will carry out and the results of said testing</b>
<b>MILESTONE – COMPLETE TESTING OF SOLUTION</b>		
<b>EASTER</b>	<b>17/04/2017 – 23/04/2017</b>	<b>Include in my report: details about future developments for the solution, reflections on my work and my conclusion about the overall project</b>
<b>EASTER</b>	<b>24/04/2017 – 30/04/2017</b>	<b>Review my final report</b>  <b>Start preparing a presentation for the project viva</b>
<b>12</b>	<b>01/05/2017 – 05/05/2017</b>	<b>Review meeting four with supervisor to discuss the results of my user testing and to discuss my final report and project viva</b>  <b>Complete my final report</b>  <b>Submit my final report</b>  <b>Work on project viva presentation</b>
<b>MILESTONE – SUBMIT FINAL REPORT</b>		

## References

[1] I. Spasic, Cardiff University. *Research Ethics*. [Online]. Available at: <http://users.cs.cf.ac.uk/I.Spasic/ethics/> [Accessed: 25/01/2017].

[2] Cardiff University. *Epigeum: Research Skills: Ethics 1: Good Research Practise*. [Online]. Available at: [https://researchskills.cf.ac.uk/researchskills/ethics/good\\_practice/index.html](https://researchskills.cf.ac.uk/researchskills/ethics/good_practice/index.html) [Accessed: 25/01/2017].