

# Final Year Project Report

## Full Unit – Project Plan

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### **A study in (HCI) human computer interaction**

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A report submitted in part fulfilment of the degree of

**BSc (Hons) in Computer Science**

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## Abstract

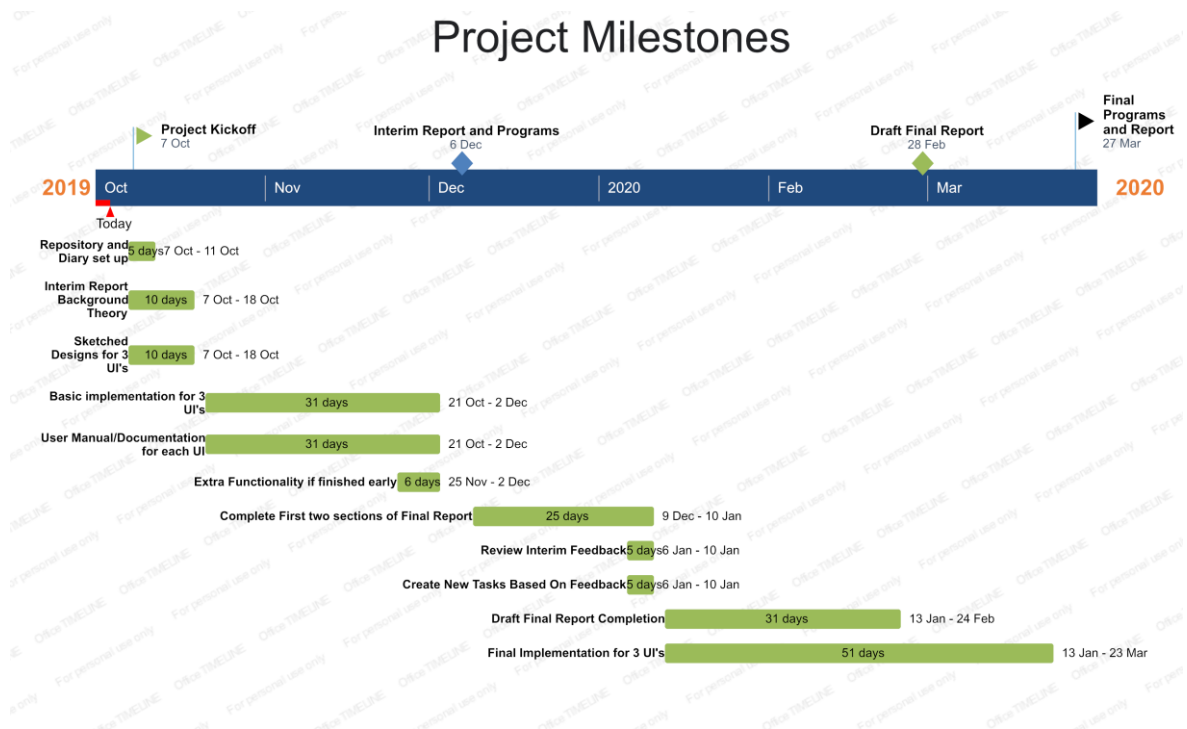
I decided to choose this project because it is part of the computer science field that first drew me to the course and is a part of my career aspirations post university. Whilst studying A levels I took part in a week's work experience with Sky and worked with a group of graduate front end developers on a streaming application tailored for business clients of the company. Being able to get hands on experience in the agile process of front end development is where I started thinking more about how we actually interact with computers and how much fine detail goes into making a fresh and usable interface. As well as this, my second year team project based on creating a website gave me the chance to design a user interface as part of a team. After finishing the team project and getting a better idea of how consumers want interfaces to work and look, I wanted to do something similar for the individual project in my final year.

With this project I would like to incorporate one of my passions which is sport. Using sport as a focal point will open up a variety of options for design within the interfaces I will produce. Having taken part in university sport over my time at university and also being elected to be the captain for a sports team I understand that fixture management can be difficult. Therefore I would like to design some interfaces to be used by Royal Holloway students and staff to check fixtures, post results and will also allow captains/coaches to view the availability of students for fixtures in their respective teams. These interfaces will include a website which showing fixtures with live scores/results and locations of where on/off campus they are being played, a Graphical User Interface from the point of view of a captain being able to select players for squads and enter results for fixtures, and a mobile interface with some touchscreen capabilities.

## Bibliography

- ▶ Final Year Project List Page: I started reading over the aims and background on the FYP list page to get an initial idea of the scope of the project and where to get started which led me to the links of recommended readings.
- ▶ Human-Computer Interaction (3<sup>rd</sup> Edition) (website): This website outlines the key points of each chapter from the book with links to further readings and standards, resources and exercises. This quickly became my main source of research and will continue to help me throughout the project process.
- ▶ Interaction Design: Beyond Human-Computer Interaction (5<sup>th</sup> Edition), Wiley 2019: This book I used as a more up to date piece of research, it will be used alongside the previous book to see how some approaches will have changed when designing user interfaces over the past 10/15 years.
- ▶ Sketching User Experiences: Getting the Design Right and the Right Design, Elsevier 2007: In order to start producing some UI's I am going to need to sketch some initial ideas on paper and get feedback from them. This book I am currently reading to see how designs start from the very beginning which will help me during the first week or two when I start the project.
- ▶ Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Rules, Morgan Kaufmann 2010: This reading is being used as a rule book of design mistakes to avoid.

# Timeline



- ▶ The tasks set within term 1 are mainly there to get the project started with more tasks being designed week by week. Namely throughout the basic implementation of each UI, I will aim to have most of the web and GUI interface done prior to the interim and have had made a good start on the mobile interface
- ▶ For the interim report I can get a head start on the background theory early into the term and keep a track of my readings in the bibliography. However I will need to make sure I keep a detailed and regular diary to ensure I can explain my processes throughout the project.
- ▶ Anytime I add functionality to the interfaces that is properly tested and works I will add it to the user manual/documentation for the relevant UI.
- ▶ Term 2 tasks are limited at the current stage because they mainly depend on how term 1 goes and requires analysis of the feedback provided after Christmas.
- ▶ Similarly to the interim report I can start the final report as early as the Christmas break by writing the rationale, contents and knowledge and the professional issues sections. This will give me more time to focus on the programs themselves and any optional extra pieces of functionality I would like to add if I get the chance.
- ▶ Each milestone over the course of term 1 and term 2 has a deadline of 5 days prior to any firm project deadline, this will give me plenty of time to where I am at with each task and always be in a good place to submit work on time.

## Risk Assessment

- ▶ Mobile application interface may become tricky and take up a lot of my time, therefore I should dedicate time to be spent on each UI and make sure I'm not wasting time hitting barriers programming when I could be working on reports or other UI's.
- ▶ Risk of repository errors could mean I lose or overwrite work that I shouldn't have, therefore I will keep a copy of my project directory on a local hard drive as well as the repo.
- ▶ Some tasks may not be feasible within the times I agree which I will discuss with my supervisor and readjust if needed. This risk I quite likely to occur because there will be some tasks that will take longer than expected and will need readjusting.
- ▶ Unexpected delays in reaching milestones may occur for which I will notify my supervisor and catch up when possible, unless before a firm end of term deadline for which an extension may become necessary. This risk isn't very likely to occur however it is important I have this plan in place.
- ▶ Part of this project will include some user tests for which I will require some tester to review the UI's. There is a possibility that I cannot find general people to test my designs, as a result I will use some other students or friends and family.