

Final Year Project Scope

Background of the application

This application is designed to assist the person in managing their nutritional and dietary needs. This will encompass a front-end UX appropriate to the user. The data will be stored on a remote server will the application will connect to.

For the moment, it is a full stack development containing Web app features, Relational database and a middle tier connecting the two, creating a 3-tier architecture (depending on technical requirements, this could grow). It is also including a client – server architecture.

One of the primary features to be included is predictive analysis. While it is a web application as of writing this, the requirements could change the access route to a mobile application using hybrid architecture.

The application will be derived using Feature driven design

Technical Requirements as momentarily understood

Remote web server – AWS Services (if web is the route to go)

Remote Relational database – AWS Services

Personal Laptop - (To use localhost as starter part of the application development)
(Maybe Phone)

Potential Risks or mislays of deadlines

The schedule is assuming the middle route is applied – Where some situations happened that were unexpected. If there are more unexpected situations, time can be pull from other sources as it currently supports time for leisure. More time can also be pulled if other typical work schedule, such as assignments, find themselves in redundant situations (ie All assignments up to date have been completed for the timeframe).

A security risk associated is the application, due to not being a security application, will not be as safe as other applications. If time allows it, an encryption library could be imported.

The medical risk is someone might take the application as in production (ready-made). So, a disclaimer would have to be imputed to prevent this.

If a technical requirement is missing, an appropriate substitution will have to be found quickly while temporary technology would have to be used.

The works on the application will use git server control to track its progress, so the data will be backed up as necessary.

Final risk would be illness from self. Should this happen, appropriate measures will follow suit, such as getting in contact with the authorities of the school of computing etc

Time Frame and deliverables

Note: there is allocated timeframe of minimum 10 hours per week as per my schedule

- Initial Proposal – **Sem 1 Week 1 - 4**
 - This is completed – some parts may change
- Requirements gathering - **Week 5 - 7**
 - Business Requirements
 - Gather from different people and pick five favourable
 - Technical Requirements
 - Architecture, Languages, Tools and IDE
 - Investigate into potential of Software as evaluation method
 - Look into datasets
- Initial Design – **Week 8 & 9**
 - Low-fide diagram, UML diagram, Class diagram etc
- Vertical Prototype – **Week 10 - 12**
 - Investigate specific software to config for application requirements, such as the full stack of the application
 - Find specific tools and software for testing and evaluation of application for after development
- Interim Report – **Week 7 - 12**
 - From week 7 of semester 1, write drafts of the solutions until appropriate for the report
 - Keep writing until due date
- Interim Demonstration – **Week 13 & 14**
- Final Design – **Xmas period – 3 weeks before Sem week 1**
- Implementation Process - **2 weeks before Sem week 1 – week 4**
 - Make sure the report explains the necessities of the application
- Software Testing - **week 5 – Week 10**
 - Create criteria for tests to pass – ie white box, black box etc
 - Use Software for automated testing eg Selenium for front-end
 - **This part will be week 5 to week 7 for development**
 - Use people to manual test the project
- Project Evaluation - **Week 5 - 10**
 - Create criteria for minimum expectation of the app as an evaluation tool
 - Using proven methods such as 10 heuristics to evaluate the app
 - Obtain feedback from Users after they tested it as evaluation tool
 - If software exists to evaluate the app, use it
 - Compare results with min expectations
- Dissertation Report – **2 weeks before Sem 1 to week 10**
 - Start to write before week 1 of semester 2 starts
 - Do drafts until appropriate for Report
 - Keep writing until Due date
- Final Demonstration - **After Week 10**