Graded Unit – Log diary

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# Thursday 8th of December 2022 – Requirements Gathering

Today I worked on creating a questionnaire for my meeting next with the client Mr Muir to discuss requirements for the project that has been issued.   
  
These included some basic items that may have been overlooked in the initial project brief. I look forward to the meeting as I can then begin drafting up the official requirements specification which will be my main guide reference throughout this project

# Friday 9th of December 2022 – Working on the Gannt Chart

Today I created the first draft of my project plan in MS Project. This gives me a visualisation of my deadlines that I have for this project. I will update this plan with any changes that appear along the way.

# Thursday 15th of December 2022 – Meeting with Mr Muir

The meeting with Mr Muir took place today. In this interview I asked some questions on the giving project brief as a means of generating requirements for the application.   
  
The giving information should make it possible to generate requirements draft for the application.   
  
I have a meeting again with Mr Muir next month to ask any more questions that might present itself.

# Friday 6th of January 2023 – Gannt Chart Finalization

Today I worked on finalizing my Gannt Chart/overall project plan. In this document my schedule of tasks for this project are outlined and their due dates. This provides a visualisation in the form a Gannt Chart with a clear visual flow of the project.

# Tuesday 10th of January 2023 – Drafting First Set of Use Cases

Today I will start to write up my first use cases for the project based on the requirements gathered from Mr Muir. These will define the main actors of the application and the functionality these roles require. This will lead into my use case diagram which will be presented to Mr Muir.

# Wednesday 11th of January 2023 – Begin Drafting SRS Document

Today I started drafting my software requirement specification document requested by Mr Muir. This will only serve as a draft to display to the client for initial feedback. The document covers the basic functional requirements for the application so a reference can be made throughout the project to the agreed upon functionality of the product. The next meeting with Mr Muir is scheduled for the 19th of January.

# Friday 13th of January 2023 – Finalising and Submitting Top-Level Use Case and SRS Document

Today I reviewed my use cases and diagram to make sure I have all that I need to finish the SRS document. These are now finished in preparation for my next meeting with Mr Muir.

# Thursday 19th of January – Meeting with Mr Muir

Today was the meeting with Mr Muir and it went very well. Mr Muir was pleased with the use case diagram and SRS document. I always got to ask a few follow up questions that I acquired when writing the SRS document. With this feedback I now have confidence to go ahead and start writing my planning report due for the 3rd of March.

# Monday 13th of February – Planning Report Process Begins

This is now the point of being full steam ahead of creating the final planning report which will be submitted on March 3rd. This will include my analysis and design solutions for the project brief.

Today I am simply beginning my research for the report and creating the initial document. I will create a checklist of what I will need to include in my design section also so I don’t miss any business or user models that are key to the application.

Finished today by finishing my first Activity Diagram for the design solution. This states the login process for the admin login in a flow visualisation. I plan to do a few activity diagrams as I feel they present the business model of the system well.

Next session I will continue with creating my designs.

# Tuesday 14th of February – Activity Diagram Continued

Today I will continue with working on the activity diagrams which will be referenced within my planning report. Today I plan to finish off the additional two activity diagrams that demonstrate the activity flow for the key user the administrator.

Finished today with finishing my three activity diagrams for admin. I would like to include swim lanes into these diagrams for extra transparency. I’ll start next session off by doing this then I will move onto creating activity diagrams for the coach user.

# Tuesday 21st of February – Activity Diagram Continued

Today I will continue the activity diagrams that will be included in my planning report. I will start off by amending my already created admin activity diagrams to add swim lanes to each of them.

Finished today with the updated admin activity diagrams finished. I created the first coach activity diagram also.

Additionally I did a handwritten sketch of the planned navigation for the system to create a better understanding of the layout of the system. I will turn this into a digital nav map to include in my report as I think it helps convey the main skeleton design.

Next session will be making this nav map and starting my research for external storage within a WPF app for when I need to start the build of this system.

# Thursday 23rd of February – Navigation Map / Use Case Updates / Activity Diagrams Continued

Today I started with transition my paper based navigation map to a online digital diagram through Visio. This gives me a clear understand of how windows I will have in my WPF and classes.

I have noticed my use cases don’t quite match what I plan to have so I will update those today.

I finished today with updating my use case diagram to reflect the changes to the use cases. Next session I will finish my activity diagrams and begin working on my CRC cards and Class Diagram as we begin to think of the static view of the system we are building.

# Monday 27th of February 2023 – Diagram finalising

Today will be the last day spent on creating static, dynamic and user models for the system. After I will finish off my documentation which includes an SRS, design document and the main planning report. This will all be submitted by the 3rd of march and will mark the end of stage 1 of this project.

# Tuesday 28th of February 2023 – Report Writing

This will be the main final session of the planning phase. I will be finalising each design and writing the planning report.

Next session will begin the development phase.

# Thursday 16th of March 2023 – Development of The Application Begins

Today I started the build of the system commissioned by the client. This session ended with the login system being built for the application. Only the admin user has been implemented so far.

Next session I will implement the login in for the coaches.

# Thursday 23rd of March 2023 – Base Login System finalisation

Today I finished the base design for the login system of the application. This includes both users’ admin and coach. I would like to come back to the login system to clean up the data storing of passwords or maybe add a feature that allows admin to create new logins for new coaches of the club.

Next session I will work on linking the connections between my windows and object classes for admin and coach and make the hub area dynamically generated depending on the current user.

# Thursday 30th of March 2023 – Hub Area / object connection programmed

Today I finished the hub area window which serves as the main navigational area for the application. This area is also personalised to the specific user currently logged in and this is displayed at the bottom of the screen.

I also improved my login code to be more object oriented which is of course our main goal when building this system so now the window communicates to the different objects correctly.

I will now enter a research phase when I finalise my understanding on embedding SQL databases into WPF with the use of entity framework and SQLite. I will complete a test app which I will use to experiment with the possibilities with these tools before implementing them into my main application.

# Friday 7th of April 2023 – Development Research – WPF Entity Framework / SQL integration

Today was my research session where I ran down my notes gathered in the planning stage on databases and made a choice of which integration method would suit my application.

It was clear the application would need a form of SQL to have a database be functional, but the question what version of SQL would fit in this program.

The choice I picked was SQLite which is a smaller library that delivers the means to embed a database file within the WPF program itself.

I will document this in my development report that will be submitted alongside the application on why this decision was made.

Next session I will work on my test app I am making which will see me use SQLite for the first time.

# Monday 10th of April 2023 – Building the SQLite test application

Today I was using my self-research to try and apply an SQL database into an WPF application. This was successful so I moved onto adding operations like add, update/edit and delete records. I used my C# programming knowledge for this and it was successful.

SQLite seems like the perfect fit for what this application needs however there a some cons to using SQLite which will be included in my development report and my evaluation.

# Wednesday 12th of April 2023 – Begin writing notes for development report / continue testing my SQLite test app

Today’s session will involve testing features on my SQLite app like adding multiple entities (tables) to the application or adding new columns to existing tables and documenting the results.

The notes taken from this will be crucial for my evaluation and development reports as they will serve as evidence of my self-research and self-reflection.

# Wednesday 19th of April 2023 – Finalising core elements and functionality of the system

Today’s session will be the last day working on the core backend features. Next week I will add in extra features like exception handling.

# Wednesday 26th of April 2023 – Documenting the program with comments and beginning the testing

Today serves as the last day working on the program itself. With exception handling added all there is left to add is my full comments throughout the program on top of the comments I made during development.

Today I will also begin working on the documentation which will be a report and user-manual.

# Wednesday 3rd of May 2023 – End of project

Today I will submit all my documents and my source code for the application.