CS39440: Weekly Logs

GAMEPILE

Department of Computer Science,
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Week 1 – W/C: 29th January — Project Initiation

1.1 - Week's Objectives

The objectives for the first week of the project are to decide on the specifics of development. To this end, a project outline will be produced in order to determine: the development methodology going forward, initial research to be carried out, the scope of the project and the platform development will be performed on.

1.2 - Completed Tasks

1. Initial Research
   - Initial research was carried out on competing applications that offer similar features to the ones proposed by the project. Two of these competitors are Backloggd and HowLongToBeat.
2. Document Template Created
   - A template for the typesetting system Typst was devised in order to produce the official documents for this project.

1.3 - Challenges Faced

Finding an appropriate platform for development was initially challenging. Most "powerful" modern UI toolkits are web-based in some way, and one of the goals of the project is to provide a solution that uses a native UI library. Some research into appropriate programming languages has been detailed in `kas143-LanguageSelection`.

1.4 - Plans for Next Week

Plans for Week 2 include further development of the project outline and completion of the Language Selection report showcasing different options regarding development.

Week 2 – W/C: 5th February — Project Outline and Preperation

2.1 - Week's Objectives

This weeks focus is on finishing the project outline and selecting a programming language. By finishing the outline, a development methodology and environment could be established - allowing for the start of development.

2.2 - Completed Tasks

1. Project Outline Completed
   - The project outline has been completed, this document will provide a good framework for what the project sets out to do.
2. Language Selection Document
   - A document was produced weighing up the advantages of different programming languages that could be used in the project. A final decision is yet to be reached.
3. GitHub Repository Created
   - A private GitHub repository has been created to host the source code for the project. It will also host the source files for documentation, including this document.

2.3 - Challenges Faced

Deciding on a programming language is still proving to be difficult. Cursory looks at Python (PyQt) and QtJambi were not promising. In my view, Python's syntax is too simple for a project of this scope, whilst QtJambi seems to not have very active development and setting up a development environment for it proved troubling.

2.4 - Plans for Next Week

Next week, a Requirements Analysis will be produced. This will allow for development to properly start under the Kanban methodology, where each functional requirement is used as a "card" in order to track development.

A final decision regarding a programming language will also have to be made.

Week 3 – W/C: 12th February — Requirements and Development Begins

3.1 - Completed Tasks

1. Final Decision on Programming Language
   - It has been decided that C++ will be the programming language used for this project. The Qt UI Toolkit will also be used.
2. Continuous Integration

3.2 - Plans for Next Week

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Week 4 – W/C: 19th February — Initial Development Complications

4.1 - Completed Tasks

1. Learning Qt (using Documentation)
2. Class Diagram
3. Rewrite of Project Code

4.2 - Challenges Faced

Illness and Qt not compiling on windows bug - address that development is going slower than planned.

Week 5 – W/C: 26th February — FR01 and Gaining Momentum

5.1 - Week's Objectives

This weeks objectives are to complete FR01. Last week and the beginning of this week resulted in a complete change of how the program is structured, so whilst development has been slow (in terms of the completion of Requirements) - it is anticipated that development will speed up significantly going forward.

5.2 - Completed Tasks

1. Database Schema
2. Data Persistence
3. Code Documentation Generation (doxygen)
   - Continuous Integration

Week 6 – W/C: 4th March —

Week 7 – W/C: 11th March — Mid-Project Demo

Week 8 – W/C: 18th March —

Easter Vacation: 23rd March - 15th April

Additional Notes

Easter Vacation: 23rd March - 15th April

Week 9 – W/C: 15th April —

Week 10 – W/C: 22nd April —

Week 11 – W/C: 29th April — Submission & Final Demo Prep

11.1 - Additional Notes

Project Report and Technical Work is due to be submitted on: 2024-05-03.

The Final Demonstration will take place between 2024-05-13 and 2024-05-31.