Date: 08/11/24

UniSim

METHOD SELECTION & PLANNING

TEAM6 Game Studios

Work Undertaken by:

Thomas Koukouris
Adam Khan
Oliver Herron
Sam Jordan
Nathan Hopper
Fergus Irvine

RESOURCES

Hardware Resources

The game must be designed to be used on PCs and Laptops. It must be resizable to fit different aspect ratios and should not be usable on other devices such as tablets/phones.

Software Resources

Resource Type	Name	Reason	Other options
File Sharing	Google Drive	It is easy to use and files can be well organised. Our group is also already familiar with it.	
Coding Language	Java	We are required to use Java for this project.	
Game Engine	LibGDX	Least complex and likely to be used by other groups. It also has good documentation and is performance friendly.	LWJGL Or Slick2D
Code Sharing	Github	Widely used and useful to know how to use it. A lot of support/guides are available	
Website Hosting	Github	Easy to use to create a simple static website which is all that is needed for our project. Easy to provide links to deliverables as well as a description of our project	https://webstudio.is/
Map Design	Tiled	Free to use map making software	
UML Diagram/ GANNT Chart	Lucidchart	Simple free to use software for making diagrams	
Java Documentation	OpenJDK	Extremely useful when coding in Java	
Game Assets	Kenny.nl	A large collection of free 2D game assets, very helpful as we are not required to spend time creating our own assets	

PROJECT ORGANISATION

Delivery Team
Website - Tom
Requirements - Tom
Architecture - Fergus, Adam, Sam
Method Selection and planning - Nathan
Risk assessment and mitigation - Oliver
Implementation - Sam, Adam

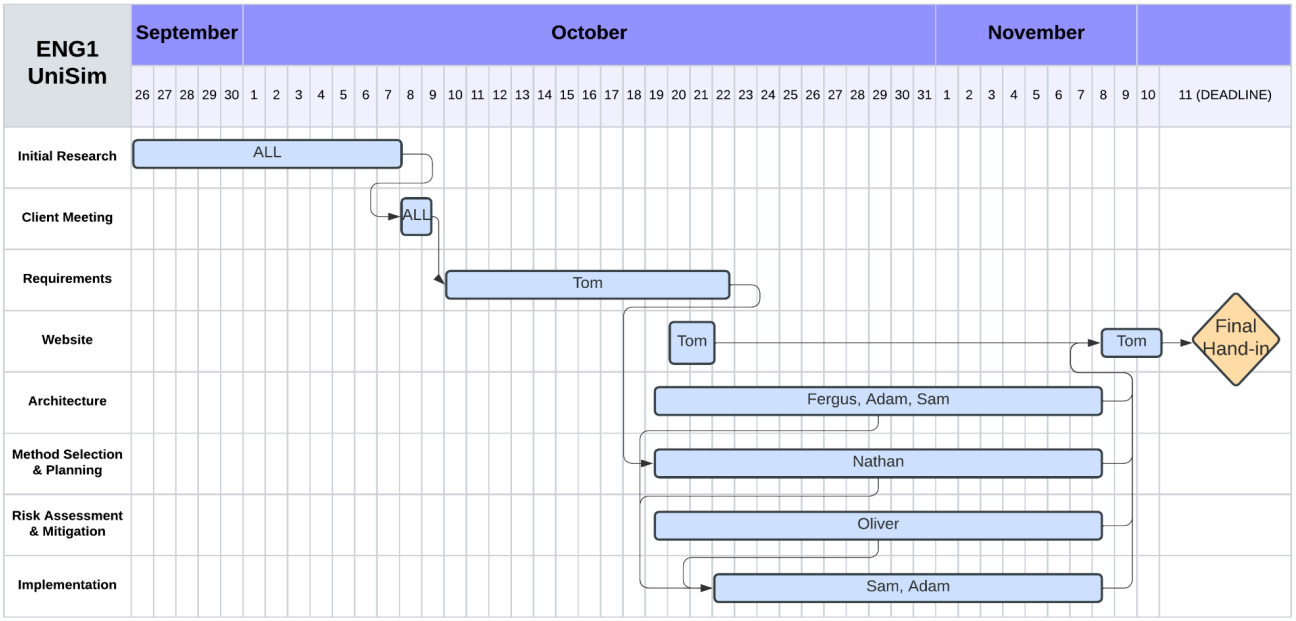
- Sam and Adam felt the most confident with the coding aspect out of anyone in our group, and so decided to primarily work on Implementation

Client
Our client is our lecturer, Konstantinos Barmpis and we can contact the customer at any time by emailing them (at konstantinos.barmpis@york.ac.uk), talking to them during our in person practical sessions, and can also request a meeting in person if it is required.

Approach
For our approach for this project we are using the Agile approach. This will allow us to make changes to our planning/project depending on problems that may arise, rather than sticking to a rigid plan.

The Agile Approach is known to work well with smaller development teams, so it should work well for our project

PROJECT SCHEDULE



We have extended the time for Architecture, Method Selection & Planning and Risk Assessment & Mitigation to 08/11/2024 to allow for higher quality in documentation. This is also due to Sam and Adam being confident in the Implementation so that they would not require as much help from other members of the group.

Initial Research

The initial research consists of gathering links to various websites/resources that would be useful further down the line during development. These resources consist of the contents in the table above. This also included coming up with questions for our Client Meeting. All members of our team helped find resources to familiarise ourselves with the project

Start Date: 26/09/2024
End Date: 07/10/2024

Priority: High. Required to be completed before any of the deliverables can be worked on.
Dependencies: None

Client Meeting

The client meeting is where we ask our Client questions that we have decided on based on the initial research and our project brief.

Date: 08/10/2024

Priority: High. Required to be completed before any of the deliverables can be worked on.
Dependencies: Initial Researc

Requirements

Requirements consists of organising information from the client meeting into User and System requirements and assigning each requirement an ID for referencing.

Start Date: 10/10/2024
End Date: 22/10/2024

Priority: High
Dependencies: Client Meeting

Website
The website must host links to our deliverables as PDF Documents, the Executable JAR file and the version control repository for our team's code. The website should be clear and well laid out.

Start Date : 20/10/2024
End Date: 21/10/2024

Start Date: 08/11/2024
End Date: 10/11/2024

Split into 2 sections of work as Tom will add the links for the deliverables to the website as they are completed towards the deadline. The main bulk of the website is to be completed in the first section.

Priority: Low, low marks and can be made simply. Should prioritise other tasks
Dependencies: Requirements, Architecture, Method Section & Planning, Risk Assessment & Mitigation, Implementation

Architecture

Provides Diagrammatic representations such as UML diagrams and details the tools used to create the diagrams

Start Date: 19/10/2024
End Date: 28/10/2024

Priority: High
Dependencies: Requirements

Method Selection & Planning

Document containing details for resources, limitations, development methods, scheduling and other planning details

Start Date: 19/10/2024
End Date: 28/10/2024

Priority: Medium
Dependencies: Requirements

Risk Assessment & Mitigation

The risk assessment deliverable is used to identify risks/problems that may come up during development. It assigns each Risk with an ID and a way to mitigate risks when possible.

Start Date: 19/10/2024
End Date: 28/10/2024

Priority: Medium
Dependencies: Requirements

Implementation

The implementation refers to the documented code and the .JAR file for the game to run

Start Date: 22/10/2024
End Date: 10/11/2024

Priority: High

Dependencies: Architecture, Method Section & Planning, Risk Assessment & Mitigation, Requirements

REFERENCES

Information on different Software Development Approaches:
https://www.blackduck.com/blog/top-4-software-development-methodologies.html

Tutorial for creating a Gannt Chart:
https://www.lucidchart.com/pages/what-is-a-gantt-chart