**Introduction**

The gaming industry has one of the highest revenues, with an estimate of making 217 billion USD in 2022. The revenue of the gaming industry is still growing at a rapid rate due to the increase in mobile gamers that have completely changed the industry forever. However, due to the mainstream platforms that are charging high fees for the distribution of games, it means that the developers are being forced to bring back the development of web-based games.

In this project I am developing a web-based game application that will be made using HTML, CSS and JavaScript. I am creating this report alongside the game which will display the plan for the project of the COMP1004 module. This project will follow the software development lifecycle to ensure that the development of the game will be structured. This means that I will be able to plan and manage my time more efficiently, resulting in a more successful completed game that will meet the requirements and deadlines.

The report shows the steps I have taken to complete this game, highlighting the issues that may have had an impact on time when designing and developing the game, and any concerns that I have discovered, which may be legal social and ethical, throughout the project. It will also present the requirements that I will follow to ensure the success of the game, which will also help with the development of the architecture. I will finish the project by talking about the sprints and how they helped with the planning of tasks for each week. An evaluation will follow, explaining how the project went and whether it was a success.

**Software development lifecycle**

For this project I have decided to use the scrum methodology. I believe that following this specific methodology will result in a more successful game. This is due to the sprints that will be taking place every two weeks in the project. This structure allows the tasks to be reviewed more often and it will ensure that only specific tasks will be completed during each 2-week sprint. This means that the team will have a stronger idea of what they are doing, keeping them motivated to stay focused and to complete the tasks within the sprint.

These are the software development life cycle steps:

* Planning
* Requirements Analysis
* Design
* Implementation
* Testing
* Deployment
* Maintenance

Following these steps ensure that the result of the project is completed by the deadline, with any issues that may arise is tackled much more efficiently. It could take much longer to complete a project and many unexpected issues could occur if this structure is not followed.

The main items that are featured in the scrum model are:

Product backlog

Sprint backlog

The start of the sprint will display the tasks that need to be taken place for the next two weeks and what items of the project will be worked on. At the end of each sprint, the project owner will decide which items have been completed. The completed software will also be displayed. Throughout the project there will be daily scrum meetings which will highlight the work completed on the previous day and the work to be completed the following day.

User stories

**Design document**

**Project vision**

**Background**

**User stories and associated user case scenarios**

**Architecture**

**Sitemap**

**Wireframes**

**Noted issues and constraints**  
**Sprints**

**Github repo link**

**References**