3D Game – Ember

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Jake – Game Developer

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INTRODUCTION

The product of this project is a first-person 3D fantasy adventure game, which has been developed using the Unity engine. The game revolves around a maze, which the users must navigate in order to escape, all while defeating enemies, solving puzzles, and collecting special items. This game is suitable for ages 10+.

The game will be used as a fun and interactive showcase of student achievement, demonstrating to prospective students what can be achieved when studying within the School of IT, Business and ESOL at WelTec, particularly when undertaking a software development major.

DEVELOPMENT

This project was developed using the Unity real-time game development platform and scripted using C# and Visual Studio. The development of this project was accomplished using the SCRUM framework, with the team working in weekly sprints to achieve their goal.

Both the product and sprint backlogs were created using the project management software Trello, and the Unity collaborate function was used for version control. All assets used within the game were either provided by the client or freely downloaded from the Unity asset store.

The team developed the game in iterations, splitting the overall game map into sections, then starting from the first section and moving through to the last. Before moving on to the next section, the previous section needed to be complete in terms of its design, physics, and detail.

While the environment was being developed, a member of the team was also working on the player class – their movement, weapon, and stats. Once the player was completed the team then moved on to implementing the enemy characters and their interaction with the player.

The team tested the game features and functionality using debugging, playtesting, and unit tests with the Unity test runner. User playtest surveys were also completed by test users to give the team feedback and recommendations regarding future development.

After the core functionality and features of the game were successfully developed and tested, the team then moved on to adding the other features such as puzzles and collectibles. Once the final features were implemented, the team conducted game optimization tasks before finally deploying as an executable.

CONCLUSION

This project has taught its team members incredibly valuable skills regarding project management, an agile attitude, personal organisation, and game development/design.

The final product of this project was presented to the client for them to use as a marketing tool to attract new students to the possible accomplishments of studying within WelTec's School of IT, Business and ESOL.