Personal Reflection

KF5012 Software Engineering Practice

W20021023

Wordcount: XXXX words

# Part A: Reflection on Development

## A1: Description

Since I am on the “games stream” path (studying Computer Science with Games Development), the task our team has undertaken as the main part of this module was to create a fully fledged (while small-scale) video game.

The game we have made was titled “Temple Run”; it is a 3D 3rd person death-run style game, where the player attempts to reach the end as fast as possible, while navigating around traps or different obstacles, made to slow the player down or completely end the run. It was inspired by different games in the same genre or in the genre of 3D platformers as a whole. The game is themed to Mesoamerican motifs and takes place in an accordingly designed temple.

As required by the module, the game was made in Unreal Engine 4, however our team also used other applications (such as Discord or GitHub) for communication and collaboration.

I have undertaken the missions “Project Management” and “2D Art and Interface” and the team missions “Game Design” and “Sound Design”. My responsibilities also included other tasks, mainly maintaining, and taking care of our team’s GitHub repository.

Overall, the development is presumably to be considered as success, as we have achieved the major objectives - that is to create a working video game with all the fundamental features a video game should have, such as gameplay with a clear goal and failure, functional controls and menus, graphics, and sound. However, the process has definitely not went without any complications or issues. These could be divided into two main categories – game development related, and team coordination related. And then further into game features wanted/planned versus game features actually made, the quality and polish of such features, troubles related to software used in the development process, difficulties with teamwork and cooperation and finally problems with meeting deadlines and time constraints.

### A1.1: My Missions

When it comes to my missions associated with creating the game itself (2D Art and Interface and Sound Design), I am quite satisfied with my work, the features I wanted to implement (and implemented) and their quality.

Due to the nature of our game, which had very little information that needed to be displayed to the player in-game (i.e., no inventory, no health, no minimap, etc) and thus a substantial HUD (heads-up display) did not need to be built, I chose to focus on a more robust menu system, which was the second major part of the 2D Art and Interface mission. Besides the visuals and the functionality of the menus, I have also implemented the game’s settings system.

I believe that accessibility, or the effort to make video games playable for everyone (including for example persons with disabilities), is very important, and as a consequence of that, I had decided to design a special set of “accessible” user interfaces catered to this use case. Every title screen or in-game (i.e., pause, game over, victory) menu and the score counter have an accessible version with a clear white background, large black font, standard buttons and other widgets, and the option for menu narration (screen reading).

The game interfaces consist of several main (title screen) menus, a couple of in-game menus and the score display. The Main menu contains the traditional Play and Quit buttons and buttons that bring up other menus – Score menu, Options menu, and Credits menu. The Score menu displays the best scores achieved by the player in the game, the Options menu allows the player to modify the game’s settings (such as graphics quality, volume, etc) and the Credits menu presents the authors of the game and the technologies used in its development. The in-game menus are comprised of Pause menu, Game Over menu and Victory menu, which are brought up either by the player or by a specific event in the game. The in-game score display shows the current score.

The game can be altered in several ways through settings (in the Options menu).

Settings

3D bg

Not build controller menu

Sound

Cursor

## A2: Analysis

Accessibility menus – good for playtesting

## A3: Lessons to be Learned

# Part B: Employability Skill Plan

## B1: Target Position

## B2: Job Adverts Used

## B3: Skills List

## B4: Personal Skills Audit

## B5: List of Final Year Modules

* KF6015 Games Design
* KF6017 Software Architecture for Games
* KF6018 Computer Graphics and Animation
* KV6002 Team Project and Professionalism
* KV6003 Individual Computing Project

## B6: Identification of Which Skills (from B4) Will Be Improved by Chosen Final Year Modules (from B5)

## B7: Skills Shortfall

## B8: Action Plan