Project Plan

Computer Science Department

Science and Technology School

CSC360

Title of the Project:

Client(s):

Students' Names: Braeden Kurfman, Christian Gnat, Joseph

Project Overview (600 words):

Overview: We will be creating a 3D platformer using the Unity Engine. We will be using Visual Studio Code and its C# library and features to ensure our code works as intended. The primary goal of this project is to make a platformer that will require precise timing in order to complete the level and require the player to make critical choices to avoid falling into the void. Discord will primarily be used to be able to have communication and share code. Google Docs will be used to share any large files.

Gameplay: Some examples of obstacles could be disappearing/ falling platforms and platforms that when landed on start a timer before they collapse. The player is in 1st person view and will have to jump across gaps between platforms in order to reach the end of the level or reach an item. There may also be platforms/ items that can increase movement speed, jump height, or any other modes of player transportation. Difficulty wise, this game is going to try to be challenging since the audience will be the class and are likely have experience with platformers/ games in general. Platformers

are pretty basic control wise so a full on tutorial would not be necessary, but adding some signposts or object that can hold text to show the controls would be a nice addition. For some features that would be difficult to implement but we are unsure if they will be possible, we would like to make a platform that can reverse gravity, and add a timer to show how quickly the player beat the level, as well as store this timer as the fastest time. This timer would not be cleared until the game has been reset. If you do end up failing the level by falling, you will be sent back to the beginning and have your timer reset. This encourages the player to have to think about each decision, otherwise they will have to deal with backtracking through parts of the level they had already been through before. The end goal will be to get to a specified platform that will be marked to indicate the end of the level. Another addition would be to make the level have different paths for the player to choose from so if they find one path too tough, they can take a different challenge by going down another path.

Controls: WASD keys for movement, SPACE for jump, ENTER/ LEFT CLICK to select menu options. ESC to pause.

Story/ Character: The main character is silent as is the case with most platformers. The premise is that the main character is in a VR simulator to test the capabilities of the VR system, which is why the art style is simplistic and blocky. This is semi inspired by the "Portal" games. The environment will be filled with void/ whitespace to show this as a virtual world. The character will be invisible to the player and not have any legs or body showing in the first person perspective, as is usual with indie games.

Audience: The users of this project will probably be limited to the class members themselves with the main benefit being some form of enjoyment, and possibly generate

some interest or insight on how games are developed, specifically being developed by people who are not good artists and have little experience. I'd wager that the most interest would be from what workarounds we came up with to mimic the feel and look of other games developed in the Indie scene. Other audience members for a game like this would include the more casual audience of gamers since platforming titles are on the lower rungs of difficulty.