**Rollover Unlimited**

Game Concept

Roll a ball around an obstacle course and reach the end of the course in the shortest amount of time possible. Falling off the course will cause you to respawn at the beginning.

Features

Player can move in all directions

Player movement will have sliding

Camera will follow player movement but not rotate

Level will have slopes which will cause the player to slow down

Player will move with the arrow or wasd keys on PC

Player will move with joysticks on all other consoles

Technical Risks

This project is on such a small scale that there should be no technical risks, as there is no need from 3rd party libraries and all content is only edited by those in charge of that given content so nothing is overridden.

Game Flow

Scenes in the game include Menu, Game and leaderboard

The menu scene will have a button which will either take you to the leader board scene or the game scene

The game scene will have a portal which takes you to leaderboard and a button to return to menu such as esc key

The leaderboard will have a button to return to menu or retry level

GameObjects, Scripts and Systems

Player

The player will have 1 script which controls movement and collision

The player movement will be done with to float values moveHorizontal and moveVertical which get the input for horizontal and vertical. The game object’s rigidbody’s add force function is then called and multiples a vector3 called movement and speed.

The player script will also have a onCollisionEnter function which will dictate what happens when it collides with:

Anything tagged portal: Loads the leaderboard scene through a scene manager

Anything named DeathZone: respawns the player to the starting location of 0, 0, 0.

Main Camera

Camera Movement script which updates the cameras movement with the players, It sets an offset and then sets the camera position to the player’s position and adds the offset.

Input Method

The input method for PC movement will be the WASD keys or the arrow keys and using the mouse in menu scenes

Describe the Input method for other platforms.

The other platforms will use joy sticks in order to move and navigate menus and X button or touch controls to select each option in a menu

Deliverables

At the end of the project the game will run on PC, iOS, Android, PS vita and PS4.

System Requirements

At the end of the project the game will run on PC, iOS, Android, PS vita and PS4.

On mobile the games will be landscape with the joy stick appearing in the bottom right corner

Coding Conventions

What coding conventions will your team use? Everyone on the team should use the same conventions. Keep them simple for now! For example, will you use Hungarian notation? Will you capitalize variable or function names?

Source Control

We will be using SVN as our source control and only asset folders and project settings should be committed with a detailed list of changes included.

Only those assigned to certain content should be changing them and committing them.

Team Members

Matt – UI Designs

Nick – Player and camera movement, Collision and scene transition

Jeremy – Level designs