1. Plan Introduction

This software development plan details the planned development process for Untitled Speed Game.

Untitled Speed Game is a 3D first person platformer game. MVP features include basic first person controller, wallrunning, sliding, grapple hook, and a tutorial level. The game will be for PC (potentially MacOS as well). The game will be built in unity, with the scripts written in C#.

Some features I would also want to include are additional levels, saving scores (potentially to a Firebase or AWS scoreboard), and as a stretch goal, animations for the player to clarify what action they are taking.

In terms of Game Design, the game should focus on speed and incremental improvements, rather than precision. Some ideas I want to implement are level designs with multiple routes and terrain that encourages different mechanics.

2. Project Deliverables

a. Basic 3D player controller
    i. This is necessary for the game to function as a 3D first person game.
b. Several Movement Mechanics
    i. To give “flavor” to the movement and add depth to the strategies a player could use to complete a level as fast as possible.
c. Level Environments designed with Movement Mechanics in mind (including tutorial level)
    i. The stage the game is played on, necessary for the player to have an objective.
d. Timer and medal system
    i. Offers goals to the player, so that they can replay levels with purpose and feel motivated to improve their times.
e. Menu system
    i. Allows the player to configure the game to their liking, and select the level they would like to play from a user friendly interface.

3. Project Resources

This is a solo project, so the main resources managed are time and the computer used for development. Potentially some money would be used on the Unity Asset store for visual assets.

4. Hardware Resources

The computer used for development and testing is the same. For other playtesters and final users, they will download the game onto their device as an executable.

5. Software Resources

The project will be built on Unity, using Visual Studio and C#. The Unity version being used for development is 2021.3.30f1.

6. Project Organization

The project will be worked on in three parts. The player controller, the environments, and then the user interface. This is because each component relies on the previous one's context to be built. For example, it is impossible to test the environments if there is no player controller to explore and play it.

7. Project Schedule

The schedule is in the included GANTT chart.

8. GANTT Chart

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Spreadsheet Class		Todays Date		Feb	Feb	Mar	Mar	Mar	Mar	Apr	Apr	Apr	Apr
2			2/20/2024		Wed	Wed	Wed	Wed	Wed	Wed	Wed	Wed	Wed	Wed
4	Task	Start Date	End Date	Priority	2/21	2/28	3/6	3/13	3/20	3/27	4/3	4/10	4/17	4/24
6	-MVP-													
7	Basic First Person Control	2/21/2024	2/28/2024	3- (Critical)	Basic First Person Controller									
8	Grapple Hook	2/21/2024	3/6/2024	2- (Important)	Grapple Hook									
9	Wall Run	3/6/2024	3/27/2024	2- (Important)			Wall Run							
10	Sliding	3/6/2024	3/27/2024	2- (Important)			Sliding							
11	Double Jump	3/6/2024	3/13/2024	2- (Important)			Double Jump							
12														
13	First Enviroment	4/3/2024	4/10/2024	3- (Critical)							First Enviroment			
14	Tutorial Enviroment	4/3/2024	4/17/2024	2- (Important)							Tutorial Enviroment			
15														
16	Timer System	4/17/2024	4/24	3- (Critical)									Timer System	
17	Medal System	4/17/2024	4/24	3- (Critical)									Medal System	
18														
19	Level Select	4/17/2024	4/24	3- (Critical)									Level Select	
20	Simple Options Menu	4/17/2024	4/24	2- (Important)									Simple Options Menu	
21	-Stretch Goals-													
22	Additional Levels													
23	Leaderboard													
24	Expanded Options Menu													
25														

9. Task / Resource Table

All tasks require the same person, time, and computer, ideally not overburdened from other classes/responsibilities.