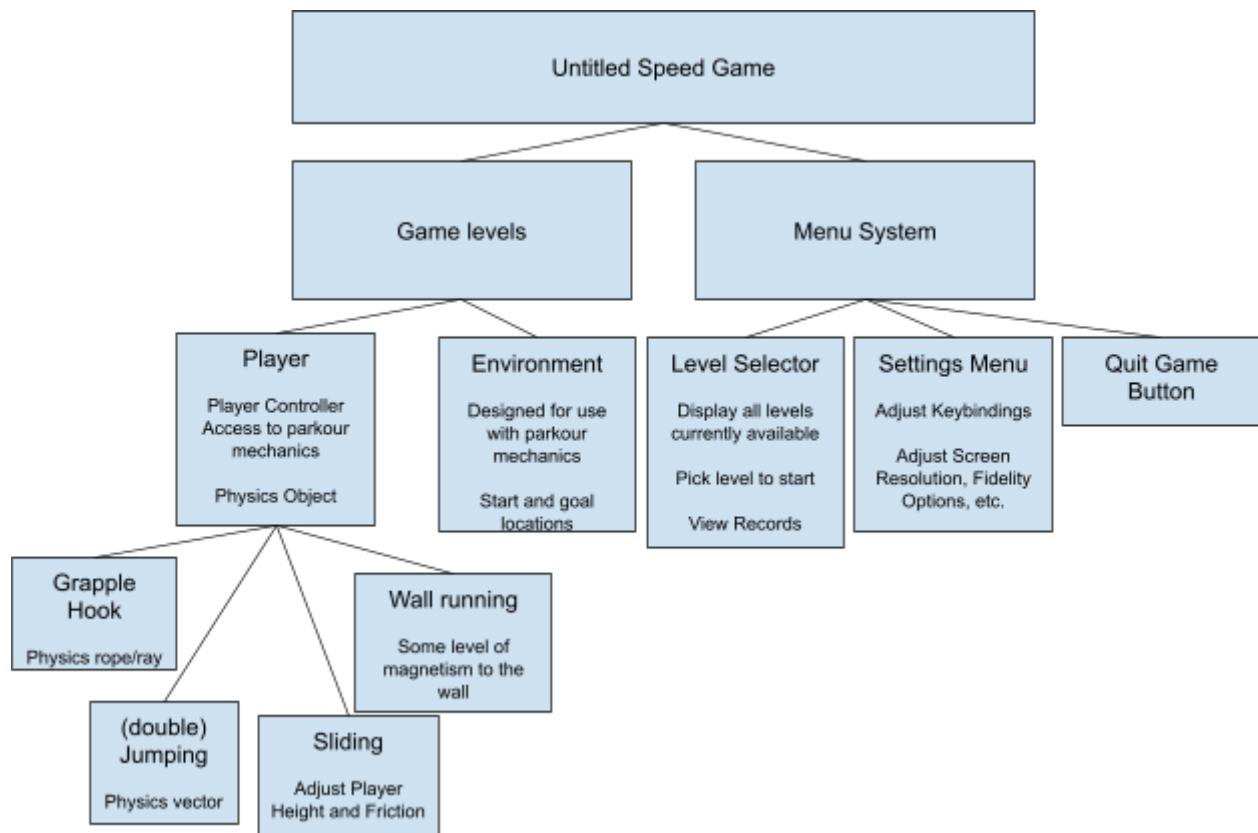# 1. Requirements Introduction

Untitled Speed Game is a first person platformer built in Unity. Players complete levels as fast as possible to earn medals and leaderboard positions. To complete the levels, players will have access to several parkour inspired movement mechanics.

2. Functional Requirements

a. Game Levels

    i. Player Object

        1. The Player Object shall have a basic first person controller with movement and camera controls.

        2. The Player Object will be able to jump.

        3. The Player Object shall have a grapple hook function.

        4. The Player Object shall have a sliding mechanic that allows the player to slide under objects or gain speed on a slope.

        5. The Player Object shall be able to wall run.

    ii. Environment

1. Game level environments shall have a start and end point.
b. Menu System
    i. Level Selector
        1. The Level Selector shall display all currently available levels to the player.
        2. The Level selector shall be able to start a level when a player selects a level.
        3. The Level selector shall display records for the levels displayed.
    ii. Settings Menu
        1. The Settings menu shall allow the player to adjust the screen resolution of the game.
        2. The Settings menu shall allow the player to adjust keybindings for (Note that camera control is not included):
            a. Grapple Hook
            b. Jumping
            c. Player Movement
            d. Sliding/Crouching
    iii. The Menu System Shall include a button that closes the game application.

3. Performance Requirements
a. Game Framerate
    i. The game's framerate when playing a level shall average at least 60 FPS on a system that meets the environment requirements.

4. Environment Requirements
a. Hardware Requirements

Category	Requirement
Processor	Intel(R) Core(TM) i7-9750H Equivalent or Better
RAM	16 GB
Graphics Card	NVIDIA RTX 2060 Equivalent or Better
Storage	5GB

These requirements are based on the system used for development and are likely an overestimate.

b. Software Requirements

Category	Requirement
OS	Windows 10 or 11
Drivers	DirectX 10,11 or 12