| **Project Design Document** | | *25/11/2021*  Sherry | | --- | |
| --- | --- | --- |

| **Project Concept** | | | |
| --- | --- | --- | --- |
| **1** **Player Control** |  | You control a   | Character | | --- | | in this   | 3D | game | | --- | --- | |
|  | where   | Keyboard input | | --- | | makes the player   | Move around in the game environment | | --- | |

| **2** **Basic**  **Gameplay** |  | During the game,   | Enemy | appear | | --- | --- | | from   | Random positions | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | and the goal of the game is to   | Kill those enemies and earn points as much as you can in a given time. | | --- | | |

| **3** **Sound**  **& Effects** |  | There will be sound effects   | When you shoot something and gun sound effects. | | | --- | --- | | and particle effects   | For muzzle flash and bullets | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | [*optional*] There will also be   | Recoil effect on character and gun + movement effects / animations. | | | --- | --- | | |

| **4** **Gameplay**  **Mechanics** |  | As the game progresses,   | Enemies spawn really quickly. | | | --- | --- | | making it   | Hard for player to shoot. | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | [*optional*] There will also be   | Gun magazines available to reload and health syringes to restore health. | | | --- | --- | | |

| **5** **User**  **Interface** |  | The   | Health | | --- | | will   | decrease | | --- | | whenever   | Enemy shoots the player.*.* | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | At the start of the game, the title   | Title menu | will appear | | --- | --- | | | and the game will end when   | Player dies or time runs out. | | | --- | --- | |

| **6** **Other Features** |  | | **Bonus Features to implement:** more player asset and animations, more types of guns, exact bullet size and damage according to the selected weapon, complete UI displaying player health, gun name that is picked, magazine size, bullets left, crosshair and enemy health, Player animation of idle and make guns not so steady while player is moving. | | | --- | --- | | |
| --- | --- | --- | --- | --- | --- |

# **Project Timeline**

| **Milestone** | **Description** | **Due** |
| --- | --- | --- |
| **#1** | | * Gun and Gun mechanics ( automatic rifle ). | | --- | | | 11/26 | | --- | |
| **#2** | | * Particle effects & sound system for that rifle | | --- | | | 11/27 | | --- | |
| **#3** | | * Player movement ( first person perspective ). | | --- | | | 11/28 | | --- | |
| **#4** | | * Player animation from idle to shooting and all others. | | --- | | | 11/19 | | --- | |
| **#5** | | * Enemy spawning at random position. | | --- | | | 11/21 | | --- | |
| **Backlog** | | * Bullets spawning and dropping down on the floor. * Magazine size and reload animation. * UI displaying crosshair, magazine size, player health, enemy health, gun name, bullets left. * Gun and player animation combined. * Gun recoil and player gitter while standing still or running. * Different guns, their different mechanics and different recoil pattern   ( sniper, shotgun, pistol, semi auto rifle ). | | --- | | | 11/30 | | --- | |

# **Project Sketch**

