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| Project Design Document | |  | | --- | | *05/04/2021*  Wuji Zhao | |

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| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | *Shooter* | | in this   |  |  | | --- | --- | | *top Down* | game | |
|  | where   |  | | --- | | *WASD*  *Mouse*  *Q*  *E* | | makes the player   |  | | --- | | *Move around the screen in all directions*  *Shooting In all directions*  *Interact with Car and Other objects*  *Use a melee attack to the direction the player is facing* | |

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| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | *Enemies (Zombies and other shooters)*  *Interactedable objects (Cars that can be loot for ammo and health supplies)*  *Obstacles (breakable and unbreakable, restrict player and enemy movement)*  *Picked-ups(health pack and ammo pack, better weapons/armor )* | appear | | from   |  | | --- | | *Settled places in the level.*  *Pick-up are random drop from enemy and loot from Interactedable objects* | |
|  | and the goal of the game is to   |  | | --- | | *Fight your way to the end of the level* | | |

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| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | *Shooting guns*  *player melee attack*  *Zombie attack*  *Enemies killed*  *looting cars*  *picking supplies* | | and particle effects   |  | | --- | | *When Enemies or player die* | |
|  | [*optional*] There will also be   |  | | --- | | *Some sort of BGM* | | |

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| 4 **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | *Enemies trying to attack the player* | | making it   |  | | --- | | *Difficult to survive* | |
|  | [*optional*] There will also be   |  | | --- | | *When looting a car there is a chance of it spawning a Zombie instead of pickups* | | |

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| 5 **User**  **Interface** |  | The   |  | | --- | | *Armor/lives*  *Ammo* | | will   |  | | --- | | *increase/decrease*  *increase/decrease* | | whenever   |  | | --- | | *pick up health or armor pack/ getting attacked (Armor will be deducted first)*  *pick up ammo pack / Fires a shot* | |
|  | At the start of the game, the title   |  |  | | --- | --- | | *Road of Death* | will appear | | | and the game will end when   |  | | --- | | *player ran out of lives/player finish the level* | |

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| 6 **Other Features** |  | |  | | --- | | *When and enemy get hit by the players bullet or melee they will be knock back will a set force*  *There will be 3 type of gun:*  *pistol (default weapon, slow fire rate, low damage, low knock back, more ammo supplies)*  *Shotgun (Fires multiple bullets at once, high knock back, high damage slow fire rate, limited ammo supplies)*  *SMG (fast fire rate, medium damage and knock back, limited ammo supplies)* | |

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# Project Timeline

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| --- | --- | --- |
| Milestone | Description | Due |
| **#1** | |  | | --- | | * *Project / Camera set up with primitive objects for all gameplay objects.* * *primitive level design with gray block* * *basic player movement* | | |  | | --- | | *05/04* | |
| **#2** | |  | | --- | | * *Road boundary* * *Health Armor system and game over condition* * *Obstacle collision* * *Pick up interaction upon collision(health/armor/ammo packs)* | | |  | | --- | | *05/10* | |
| **#3** | |  | | --- | | * *Interactable cars* * *Shooting/melee attack* * *Zombie attack and path finding logic.* | | |  | | --- | | *05/22* | |
| **#4** | |  | | --- | | * *Start Menu and Pasue menu, other UI things.* * *Cars / Enemies spawn random loot upon looted/death* | | |  | | --- | | *05/29* | |
| **#5** | |  | | --- | | * *Different guns* * *Shooter enemy function and logic* * *Breakable Obstacle* | | |  | | --- | | *06/05* | |
| **Backlog** | |  | | --- | | * *Dialog system, plot* * *Boss fight* * *Check points.* | | |  | | --- | | *06/12* | |

# Project Sketch





