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| Project Design Document | |  | | --- | | *19/11/2024*  *Space Invaders* | |

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| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | *Ship* | | in this   |  |  | | --- | --- | | *Top Down* | game | |
|  | where   |  | | --- | | *Directional buttons + spacebar* | | makes the player   |  | | --- | | *move left and right + Shoot* | |

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| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | *enemies* | appear | | from   |  | | --- | | *Top of the screen* | |
|  | and the goal of the game is to   |  | | --- | | *Not let them reach the bottom of the screen* | | |

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| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | *When player shoots* | | and particle effects   |  | | --- | | *When player hits enemy, or powerup* | |
|  | [*optional*] There will also be   |  | | --- | | *Background music playing* | | |

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| 4 **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | *different enemies will spawn* | | making it   |  | | --- | | *More difficult to adjust* | |
|  | [*optional*] There will also be   |  | | --- | | *description of any other gameplay mechanic(s) and their effect on the game.* | | |

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| 5 **User**  **Interface** |  | The   |  | | --- | | *lives* | | will   |  | | --- | | *decrease* | | whenever   |  | | --- | | *Player lets an enemy through* | |
|  | At the start of the game, the title   |  |  | | --- | --- | | *Space Invaders* | will appear | | | and the game will end when   |  | | --- | | *All lives are lost.* | |

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| 6 **Other Features** |  | |  | | --- | | *Any other notes about the project that you don’t feel were addressed in the above.* | |

# Project Timeline

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| --- | --- | --- |
| Milestone | Description | Due |
| **#1** | |  | | --- | | * *Objects added (Map, Player, enemies, projectiles)* | | |  | | --- | | *27/11* | |
| **#2** | |  | | --- | | * *PlayerController added with functionality* | | |  | | --- | | *4/12* | |
| **#3** | |  | | --- | | * *Shooting animations added + spawnManager for random enemies* | | |  | | --- | | *11/12* | |
| **#4** | |  | | --- | | * *Canvas Added for adding score on killing enemies* | | |  | | --- | | *18/12* | |
| **#5** | |  | | --- | | * *Canvas Added for startGame + endGame* | | |  | | --- | | *25/12* | |
| **Backlog** | |  | | --- | | * *Adding extra levels* * *Adding Difficulty levels with lower amounts of Health* * *Adding options to add your name on top of the ship (Player Object)* | | |  | | --- | | *15/01* | |

# Project Sketch