|  |  |  |
| --- | --- | --- |
| Project Design Document | |  | | --- | | *mm/dd/yyyy*  Student Name | |

|  |  |  |  |
| --- | --- | --- | --- |
| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | *player* | | in this   |  |  | | --- | --- | | *top Down* | game | |
|  | where   |  | | --- | | *Arrow keys* | | makes the player   |  | | --- | | *Move around the player area* | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | *Enemies that shoot items* | appear | | from   |  | | --- | | *Sides at the bottom of the screen* | |
|  | and the goal of the game is to   |  | | --- | | *To evade the items and collect random spawning good items* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | *description of sound effects* | | and particle effects   |  | | --- | | *description of particle effects* | |
|  | [*optional*] There will also be   |  | | --- | | *description of any other expected special effects or animation in the project.* | | |

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 5 **User**  **Interface** |  | The   |  | | --- | | *Score and health* | | will   |  | | --- | | *increase/decrease* | | whenever   |  | | --- | | *Score: good items are picked up. health: when hit with bad item or pick up good items* | |
|  | At the start of the game, the title   |  |  | | --- | --- | | *good or bad* | will appear | | | and the game will end when   |  | | --- | | *health is 0* | |

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

# Project Sketch

player area

Enemy area

Enemies: shoot Items from bottom of screen to top.

3 or 4 different types of enemies

Enemies walk from left to right or right to left.

Each enemy has a different walking pace, a different firing pace and different Items they shoot.

* Spawn() function random spawnrate
* walk() function each subtype has different walking pace
* shootItem() function each subtype shoots a different Item and at different rates, different hit points

player has to evade the Items, and maybe pick up random Items that appear on the screen. If player Is hit by an enemy Item then the health Is reduced. If player has zero health then game over. player can score points by picking up Items.

encapsulate:

player health, cannot get above ~20 or below 0.

keep enemy variables private