James Rumsey Project Design



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Project Name: Avoidance game improvements

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JRTI Software Development

# James Rumsey Coding – Student Project

## Description of Project

I currently plan on improving my avoidance game by adding a few extra features and quality of life improvements.

## Project features

Describe the Features that will be delivered in your project

* Scoring system
* Potions that give effects
* Attack for the player
* Attack animation for the enemy and the player
* Flashing animation for after the player loses a life
* A game over screen
* WASD key compatibility
* Fixing entity hitboxes.

## Design overview

* I am planning on using the pygame and random imports in this project. This project will be an Object Oriented program. It will be improvements to the top down game that we did in class.

## Screen Mockups

Game Over!

Score: ????

## Process flow – if required

* My game will have a player spawn at the bottom of the screen and enemies and potions moving downwards from the top of the screen. The player will be able to move left, right, up, and down and will have to avoid the enemies. If the player collects a potion, it will give them a buff based on what color the potion is.

## Use Cases

* WASD key compatibility
* When the player catches a red potion, give them an extra life.
* When the player catches a blue potion, give them a 50% speed boost for 10 seconds.
* When the player catches a yellow potion, give them invulnerability for 10 seconds.
* When the player catches a purple potion, enemies will move 50% slower for 10 seconds.
* When the player catches a green potion, enemies will spawn 50% less for 10 seconds.

## Document History

| Status | Date recorded | Issue / Question | Severity | Impact | Resolution |
| --- | --- | --- | --- | --- | --- |
| Open/Closed | Date 1 | Issue / Question | Critical, Moderate | Schedule/Hours | Resolution |
|  | Date 2 | Description | Probability | Impact | Plan |
|  | Date 3 | Description | Probability | Impact | Plan |