

## Design Overview for <<BOMBONLINE>>

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### Summary of Program

My program is a fun 2D game for two players to control characters using the keyboard. There are three exciting game modes to choose from:

#### **1. Mode 1: Single Player**

In this mode, one player controls "Character1" and faces dangerous monsters. The goal is to defeat these monsters strategically by using bombs. You can place bombs using the keyboard and make them explode after a while to defeat the monsters. Be smart and time your moves to win!

#### **2. Mode 2: Two Players Battle**

In this mode, two players control "Character1" and "Character2." Your aim is to beat your opponent by using bombs wisely. Drop bombs to create traps and outmaneuver your rival. Be quick and clever to win the exciting battle!

#### **3. Mode 3: Collect Shoes**

In this mode, two players compete to collect shoes scattered around the map. The first one to gather a certain number of shoes (like 10) wins the game. Each shoe you collect makes you faster, helping you get more shoes quickly. But be careful! Your opponent can use bombs to slow you down and take your shoes!

As you explore the game's map, you'll find different objects like barriers and crates. When you destroy these objects, you may discover three types of helpful items:

- Shoes: Picking up shoes increases your speed, making it easier to move around the map faster.
- Bombs: Grabbing bombs increases the number of bombs you have, giving you more resources to defeat monsters or your opponent.
- Power-ups: Getting power-ups makes your bombs even more powerful, causing bigger explosions to defeat monsters or your rival.

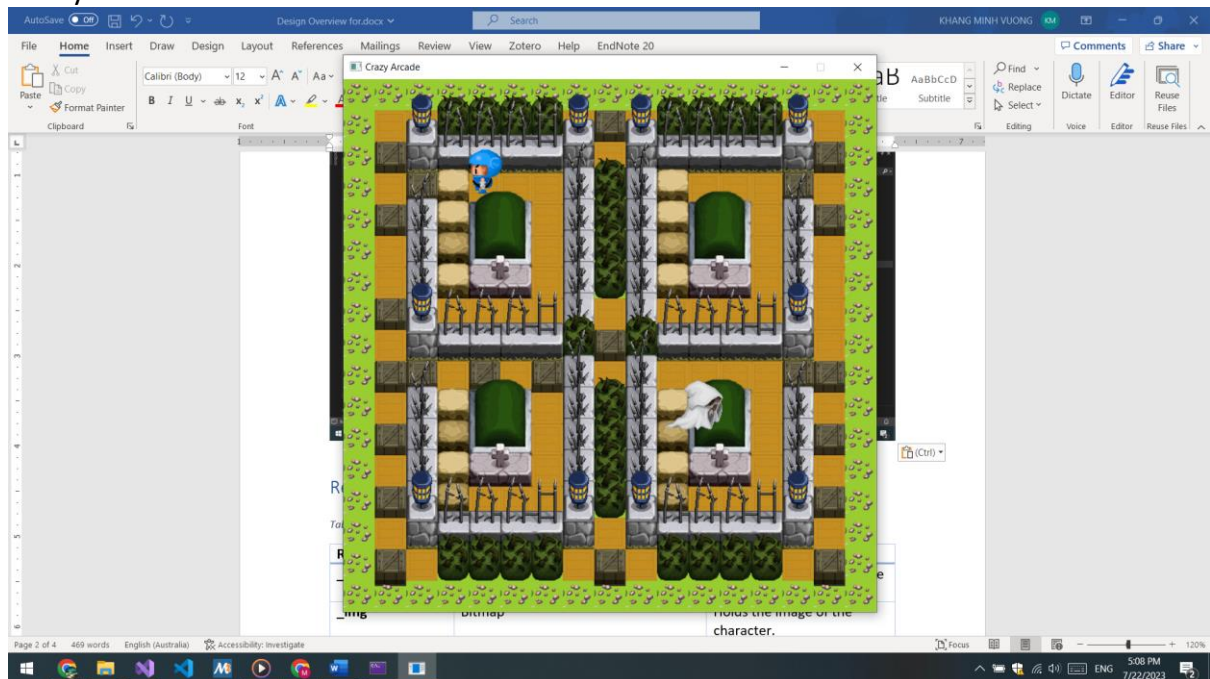
The game's characters and animations are handled by the SplashKit library, ensuring smooth and enjoyable movements based on your keyboard inputs. Have a blast strategizing, competing, and enjoying the game in these exciting game modes!

A sample

Hall:



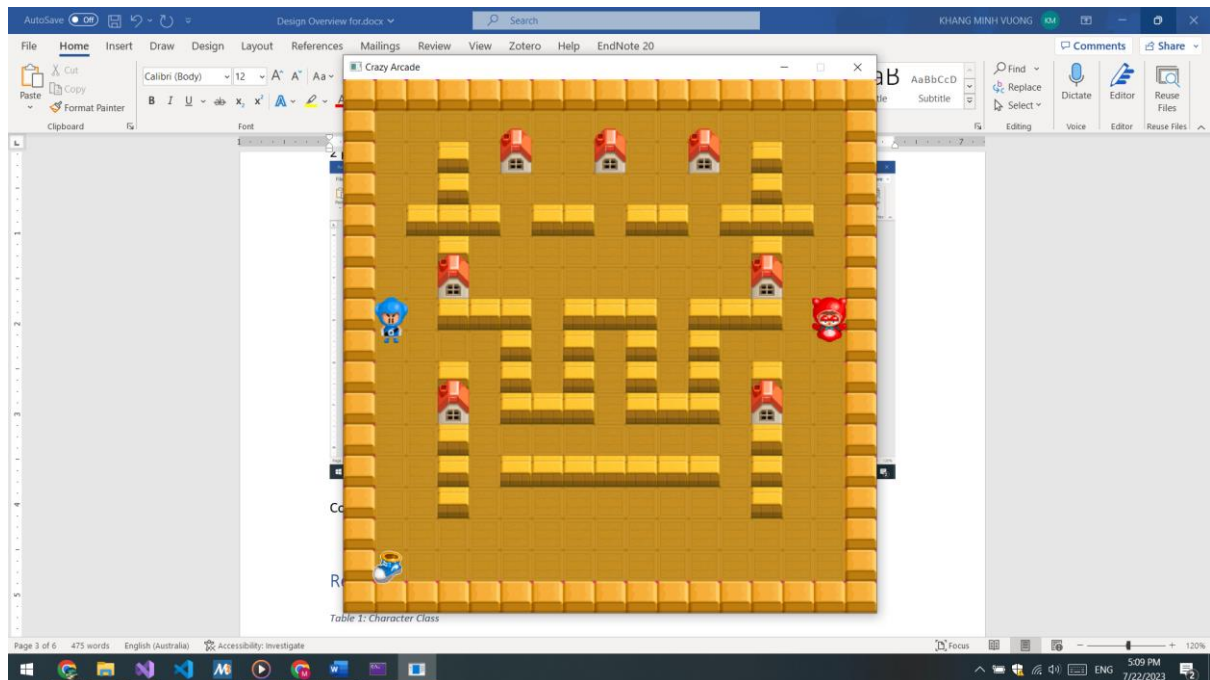
1 Player:



2 player:



Collect shoes:



## Required Roles

Table 1: Character Class

Responsibility	Type Details	Notes
_sprite	Sprite	Represents the sprite of the character

<b>_img</b>	Bitmap	Holds the image of the character.
<b>_scr</b>	AnimationScript	Stores the animation script for the character.
<b>_timer</b>	Timer	Manages the timer for character-related actions.
<b>_x</b>	float	Holds the x-coordinate of the character's position.
<b>_y</b>	float	Holds the y-coordinate of the character's position.
<b>Draw()</b>	void	Draws the character on the screen.
<b>Update()</b>	void	Updates the character's animation.

Table 2: BombController Class

Responsibility	Type Details	Notes
<b>_sprite</b>	Sprite	Represents the sprite of the bomb.
<b>_img</b>	Bitmap	Holds the image of the bomb.
<b>_scr</b>	AnimationScript	Stores the animation script for the bomb.
<b>_timer</b>	Timer	Manages the timer for character-related actions.
<b>_x</b>	float	Holds the x-coordinate of the bomb's position.
<b>_y</b>	float	Holds the y-coordinate of the bomb's position.
<b>Draw()</b>	void	Draws the bomb on the screen.
<b>Update()</b>	void	Updates the bomb's animation.

## Class Diagram



