Period: 3
Group members names: Andrei Karlin, Zacary Moore
Group Name: Pirates
Project title: Classic Platformer Game

1. Description

Functionalities:

- Converting an image to level (reading an image of 5 colors and representing each pixel as an element in a 2D array, where the value is based on the color of the image and each value is a different type of tile)
- Drawing sprites (draws images specific to whatever tile is being rendered)
- Multiple levels (colliding with the endpoint moves on to the next level)
- Using controls to move the player, interacting with the environment.
    - You can't go through walls or ceilings, or go off the screen.
    - You can jump when on the ground and hold jump to go higher
    - You die (position is reset to the start, velocity is reset) when you collide with lava or you fall into the void.

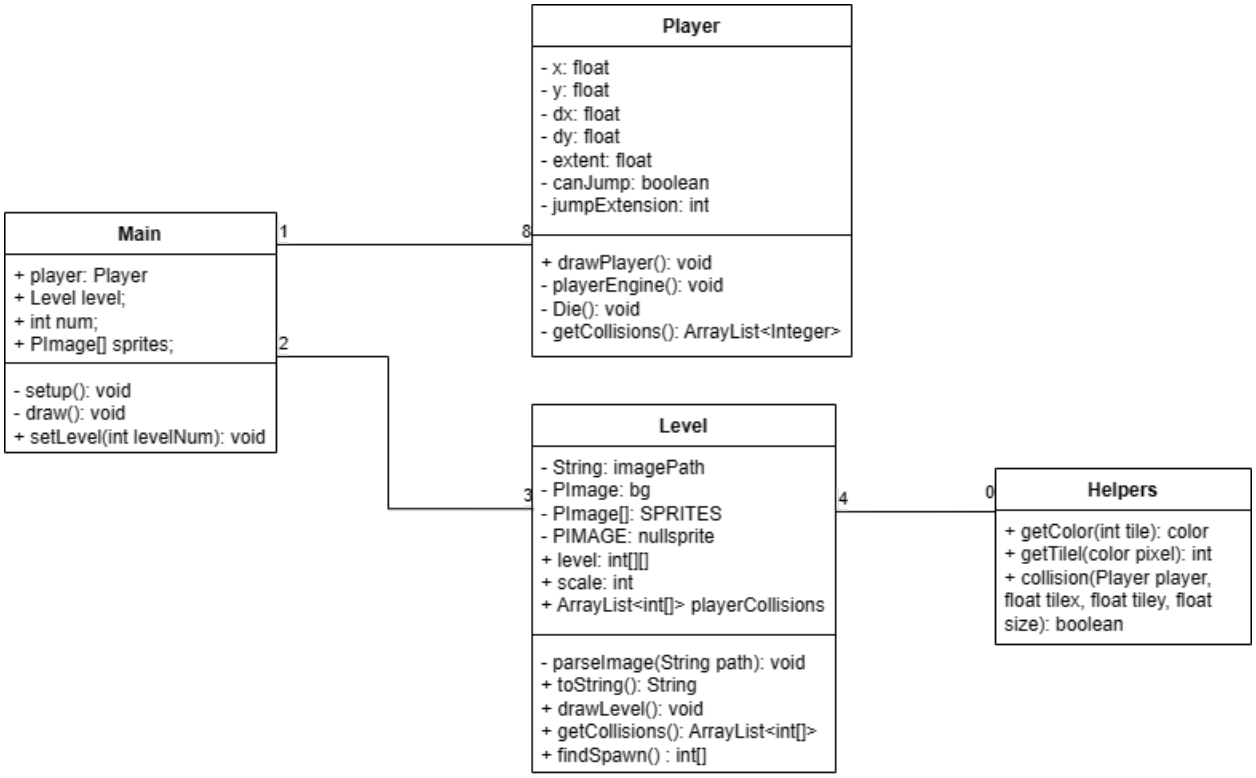
The game has 12 levels. Levels get progressively harder. Once you beat all of the levels, you get a victory screen.

No libraries were used.

2. Log

Here are the main contributions:
Andrei: Level design, the player (controls, movement, collisions, interactions, etc.)
Zac: Image parsing code, Graphics (Both the textures and rendering the levels)

3. UML Diagram



4. How does it work?

The objective of the game is to get to the final level. You beat each level by navigating around obstacles, avoiding lava and pits, and getting to the lamp at the end. The player is controlled with the arrow keys, with left and right moving the player in the respective directions and up causing the player to jump. The longer you hold the up arrow, the higher the player jumps.