

Period 3

Group Members: Jason Qin, Yinghan Li

Group Name: Anything Really

Project Title: Doodle Jump

Description:

- In this project, we worked together to basically recreate Doodle Jump.
- Current Functionalities:
 - **Screen** - Has background grid, starting menu, score, high score
 - **Player** - Moves horizontally based on keyboard inputs, can wrap around the screen, can bounce off platforms and springs, has gravity, falling out of the screen brings the user to the starting menu
 - **Platforms** - Generate in random positions getting more difficult over time, generated in different types (basic, moving, cloud, fake), moving platforms have horizontal movement, cloud and fake platforms disappear, scroll down as the player gets higher
 - **Enemies** - reset player upon collision, moving enemies have horizontal movement, scroll down as the player gets higher, killed by bullets
 - **Bullets** - shoot in three directions based on where mouse clicks
 - **Springs** - bounce player higher than platforms
- Overall, we had a lot of fun with this project. We were able to implement most of the features we planned to get done by each meeting date. Although we weren't able to add quality of life features like sound effects and sprites, we think our final result does a great job of programming the core functionalities of the original game.

Log:

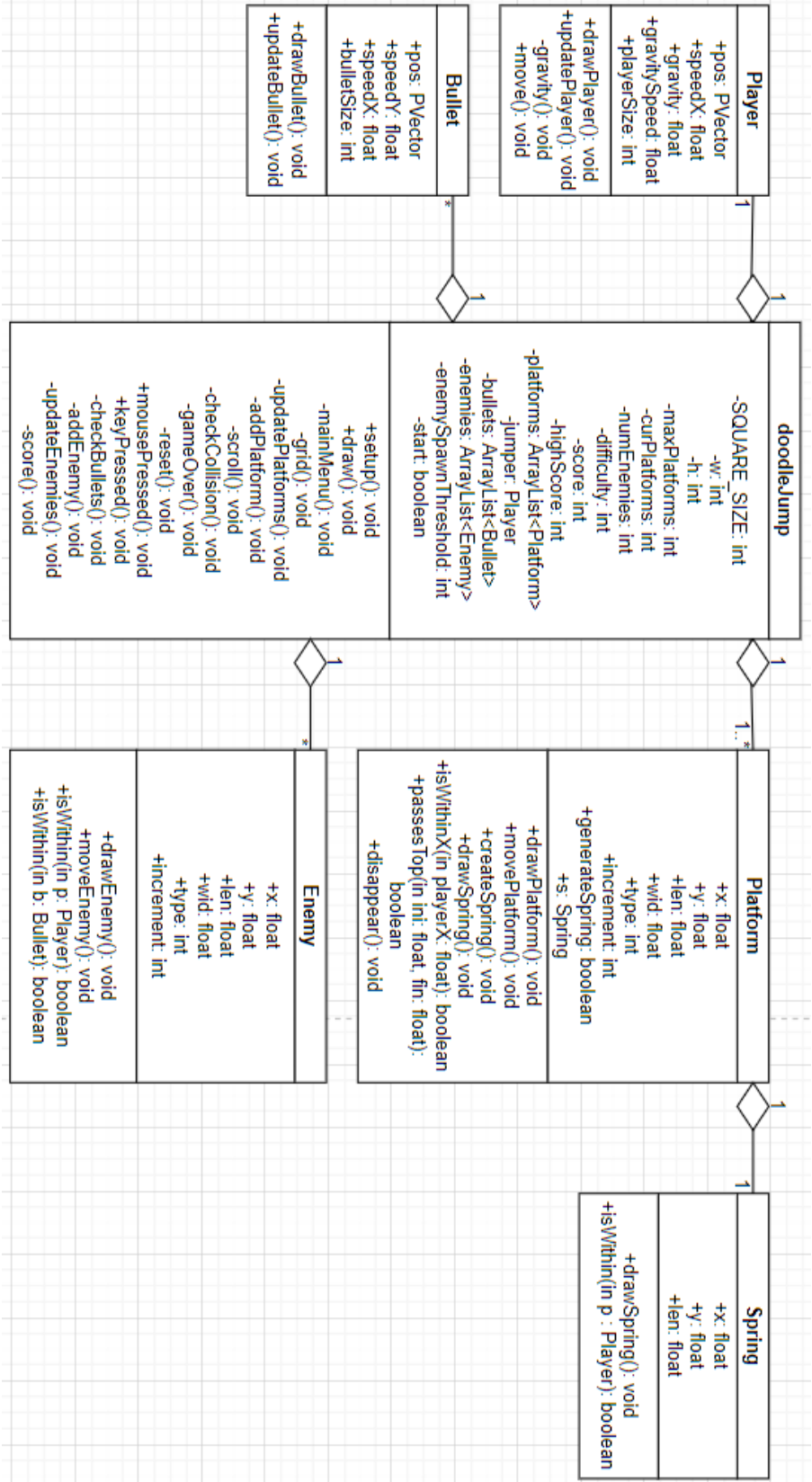
Jason:

- managed UML and meeting documents
- added basic platforms
- added game screen's background grid
- added main menu, refined game resetting
- added bullet mechanic
- added enemies
- added spring generation

Yinghan:

- added screen scrolling
- added player movement and gravity, and screen wrapping on the left and right
- added game resetting
- refined platform generation, implemented moving platforms, cloud platforms, and fake platforms
- added score calculation and high score
- added and refined game difficulty

UML Diagram



To run, please download the doodleJump folder and run doodleJump.pde in processing. The objective of the game is to get the highest score you can. There is no final goal, since the platforms generate infinitely.

How to Play:

- Start the game by clicking on the screen or pressing the spacebar key.
- Use keys A and D (or the left and right arrow keys) to move the player left and right.
- Bounce on platforms to go higher and increase your score. There are four types of platforms denoted by their colors:
 - Green - these are the basic platforms that do not move.
 - Cyan - these are moving platforms.
 - White - these are cloud platforms. Bouncing on them once will make them disappear!
 - Brown - these are fake platforms. You cannot bounce on them!
- Click on the screen with the mouse to shoot a bullet. The bullet will go in the direction relative to where you clicked it on the screen. For example, if you click towards the left of the screen, the bullet will go to the left.
- Watch out for purple enemies! Bumping into one will end the game, so try to avoid them or shoot bullets at them to destroy them.
- Some platforms have a gray spring on them! Bounce on this spring to bounce higher.