Period 6
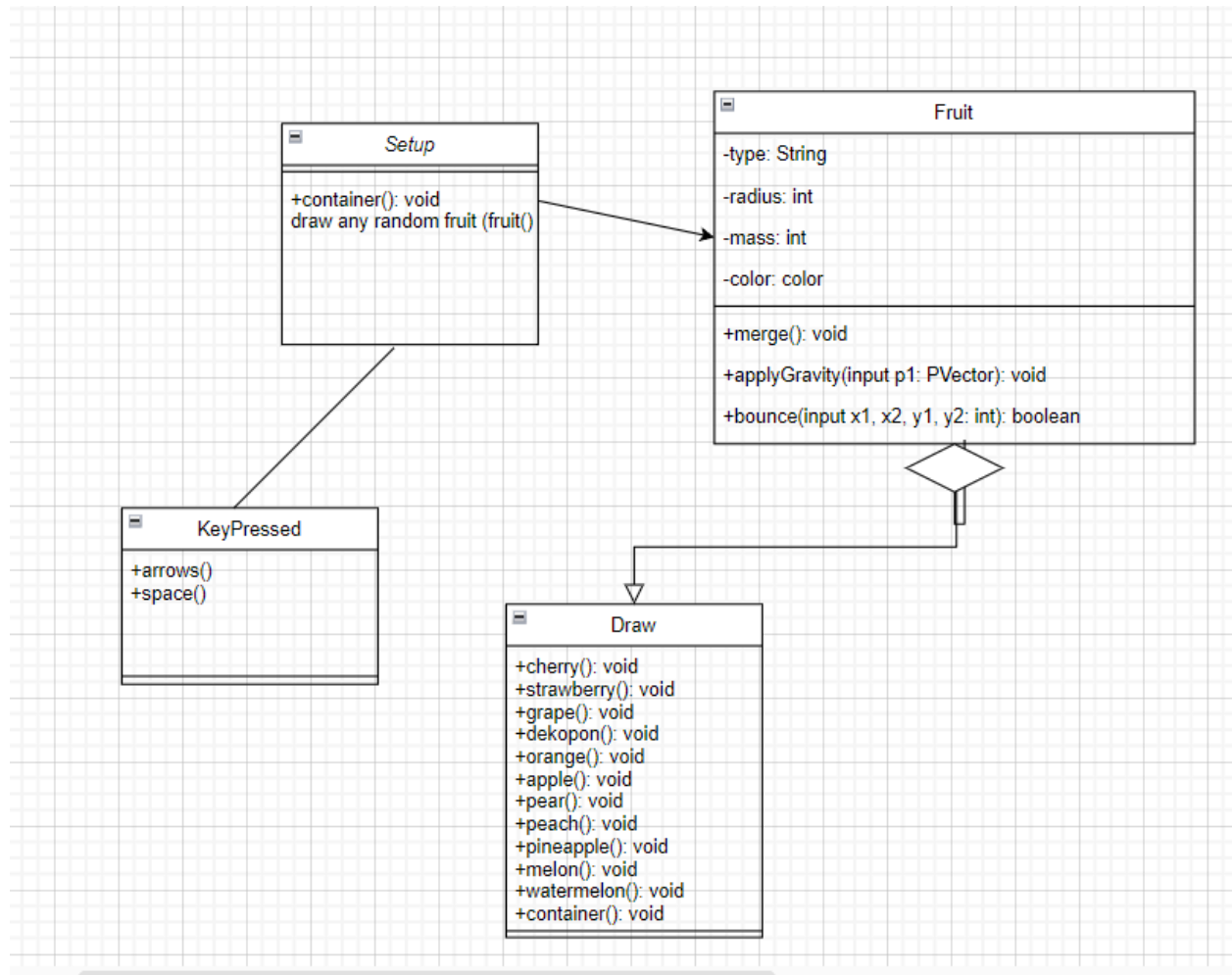Group Members: Jessica Yu and Ayesha Talukder
Group Name: Suika Fruits
Project Title: Suika Game

Description:
-   Inspired by the actual Suika Game. You drop random fruit from the top of the screen into a container and when it touches something the same fruit as the fruit you dropped, it expands and turns into a slightly larger fruit type. It adds points whenever the fruit drops and points vary depending on the size of the fruit. Whenever fruits merge, the points added doubles. The game ends when no more fruit can be dropped into the container.
-   Libraries: None needed so far
-   Functionalities:
    -   Gravity: to make the balls/fruits drop
    -   Text: to record the points
    -   Colors: to help distinguish different fruits

UML:
-   Setup Class
-   Draw Class
-   Gravity, Bounce/touch, and Merge class

Setup

+container(): void
draw any random fruit (fruit()

Fruit

-type: String
-radius: int
-mass: int
-color: color

+merge(): void
+applyGravity(input p1: PVector): void
+bounce(input x1, x2, y1, y2: int): boolean

KeyPressed

+arrows()
+space()

Draw

+cherry(): void
+strawberry(): void
+grape(): void
+dekopon(): void
+orange(): void
+apple(): void
+pear(): void
+peach(): void
+pineapple(): void
+melon(): void
+watermelon(): void
+container(): void

4. How it works
- Step 1:
    - Drop a fruit at the desired position (using the spacebar to activate)
    - If fruit touches similar fruit, the fruits will merge
    - else the fruits will stay in respective places
  Step 2:
    - Repeat until the container can no longer hold any more fruit
    - It returns the number of points you got

Objective: get the most amount of points possible without completely filling in the container.
Keys To Use:
- Left and right arrow keys to move it the fruit on the top
- Space bar to drop the fruit