Team MethodMen Shaikat Islam, Mohamed Tamara Period 5

Title: Sinuous

Proposal: Our goal is to recreate the online game <u>Sinuous</u> in Processing. We plan on using a queue for the life count, as well as have a stack of randomly generated power ups that spawn in a random location

The objective of the game is that you are a ball with a trail behind you, and you must dodge the incoming balls. The balls are spawned from the top right and go diagonally to the bottom left corner. Your ball movement is tracked by the mouse. The power ups are randomly dropped and follow the same path as the enemy balls, and have various effects:

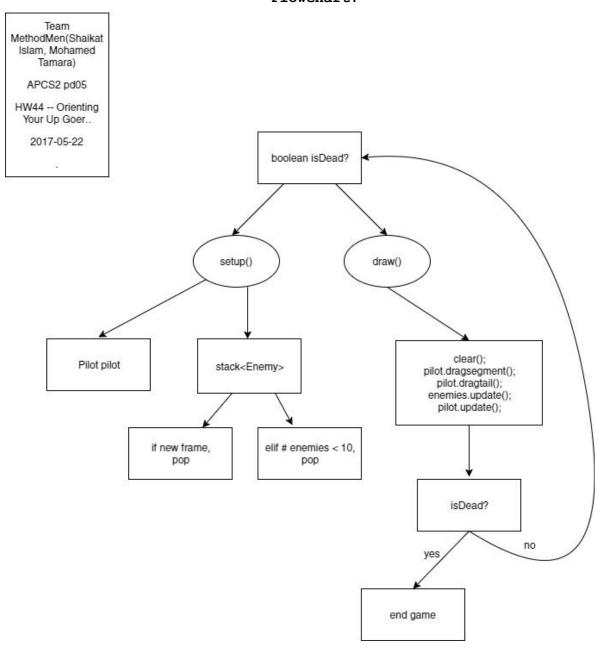
- One up: Gives the player an extra life, also destroys balls immediately around the player (1)
- Money: Allows you to collide with enemy balls to gain even more points for a period of 5 seconds (\$)
- Invincibility: As the name suggests, lets the player be invincible for 5 seconds (I)
- Time: Slows down the enemy balls for 5 seconds ball (T)
- Shrink: Shrinks the enemy balls down (M)

Along with a life counter, there will be a counter for the points, and after surpassing a certain pointage count, the level difficulty will increase, which increases the amount of balls on screen as well as speed up the balls.

ADDITION

We chose implementing a queue for the life counter because it's very appropriate. If you lose a life, it would simply dequeue it, and if you gain a life, it would be enqueued to the end. If isEmpty(), then game over. We also chose to implement a stack for the power ups because we will have a predetermined amount of power ups in a specific order (random implementation later, maybe). So all we need to do is push them out.

Flowchart:



UML Diagram:

