

Analysis

Classes





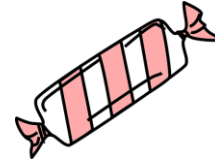
Analysis – Classes

Classes

- **Player**



- **Candy**



- **Enemy**





Analysis – Classes

- The **player** has to be able to move up, move down, move left, and move right as long as it is not beyond the boundaries of the window (0, 450) both horizontally and vertically.
- The **player** initially has 10 lives and it displays a welcome message when the game starts.
- The **player** has a specific character assigned.
- The **player** is able to shoot candy.
- **Candy** acts like a **bullet** in the game. It moves either horizontally or vertically. This is determined when the instance is created.
- The speed of the **candy** has to be a specific number within a range from 5 to 45.
- **Enemies** are created at random locations, so their initial x coordinates and y coordinates are randomly generated integers in a range from 0 to 450.
- **Enemies** have a fixed direction of movement (vertical or horizontal).
- When an **enemy** reaches the end of the screen (0 or 450 vertically or horizontally), it changes direction (if the previous direction was vertical, it will now move horizontally and vice versa).
- The speed of the **enemies** depends on the difficulty of the game selected by the human player, and it is determined when the instances are created.
- **Enemies** initially have 15 lives.
- When a **player** collides with an enemy, the player loses one life.
- When the **candy** shot by the **player** hits an **enemy**, the **enemy** loses one life.



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Player

Candy

Enemy



Analysis – Classes

```
class Player:  
    pass
```

```
class Candy:  
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```

```
class Enemy:  
    pass
```



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Attributes

