Assignment: Video Game Inheritance

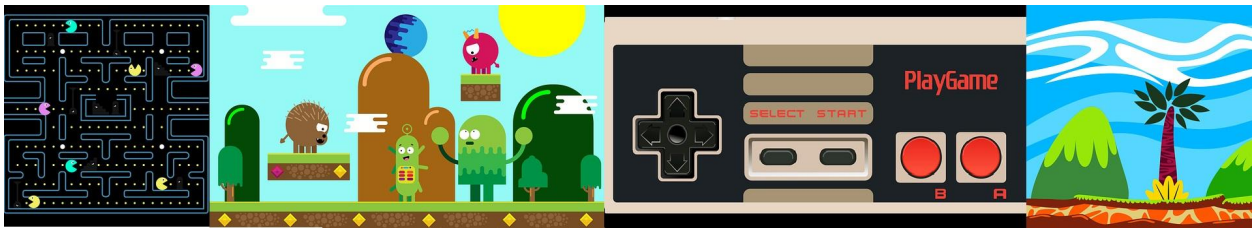
Welcome to this Mini Project.

You just signed up for a video game development competition and your team decided to use inheritance to represent the characters.

But... wait a minute!

Some team members have made mistakes in the code and the inheritance is not working correctly.

The due date to submit the game is tomorrow and you are the only one who can save your team from being disqualified.



🔹 **Your task is to:**

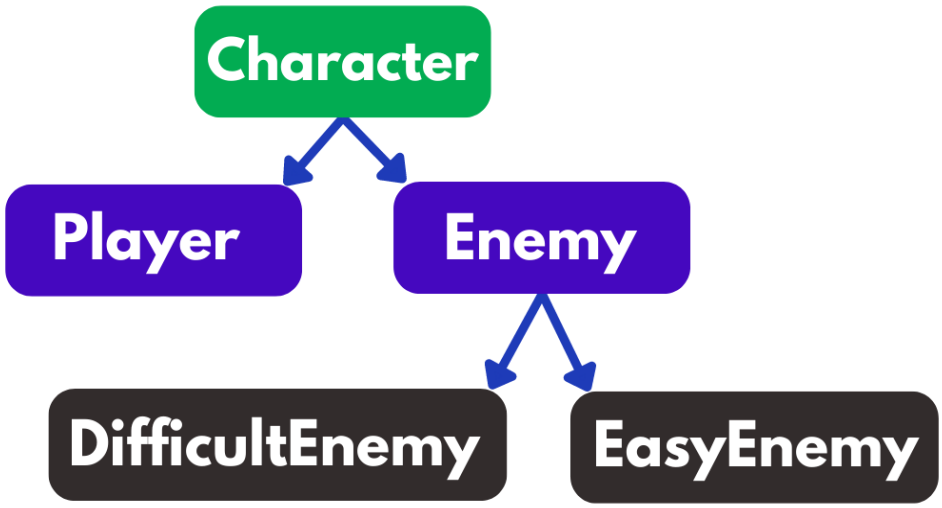
- Fix the errors in the code developed by your team.
- Implement the correct hierarchy.

🔸 **Requirements:**

- **Enemy** must be a subclass of **Character.**
- **Player** must be a subclass of **Character.**
- **Enemy** must be a superclass of **DifficultEnemy** and **EasyEnemy.**

- **Hierarchy:**

The hierarchy can be illustrated like this:



- **Code:**

This is the code that your team wrote. It throws many errors and the inheritance is not defined correctly.

```
class Sprite:

    def __init__(self, x, y, img_file, speed, life_counter):
        self.x = x
        self.y = y
        self.img_file = img_file
        self.speed = speed
        self.life_counter = life_counter
```

```
class Enemy(Sprite):

   def __init__(self, x, y, img_file, speed):
       __init__(self, x, y, img_file, speed, 5)
       self.message = "I'm here to protect my master"


class Player(Enemy):

   def __init__(self, x, y, img_file, speed):
       Sprite.(self, y, img_file, speed, 6)
       self.speed = 56


class DifficultEnemy(Enemy):

   def __init__(self, x, y, img_file):
       Enemy.__init__(self, img_file, 80)


class EasyEnemy(Player):

   Enemy.__init__(self, x, y, img_file, 40)
   def __init__(self, x, y, img_file):
       self.life_counter = 1
```

- **Tip:**

Check for missing parameters, wrong syntax, incorrect inheritance, and other errors in the code. Run the program in your code editor or IDE and fix these errors.

- **Solution:**

You can find a sample solution in the "Instructor example" tab.