

SIE508: Homework 2 --- Classes Avatar and Game

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Assignment

Design and implement two classes: **Avatar** and **Game**.

A **Game object** is initialized without Avatars objects. It should have a method **startGame**, which **initializes** an internal empty list of Avator objects. Further, it needs a method to **add** an Avator object at a time to the Game. A Game object also has a method to **animate** all its current Avatar objects. Furthermore, it should have a method to **stopGame**, which destroys all current Avator objects in its internal list.

The **Avatar** class should create simple human-type Avatars, with attributes such as *name*, *hair color*, *height*, *gender*, *superpower*. An Avatar object can **change** its hair color and superpower. It also has a method that “**animates**” the avatar. The **Animate()** method should print out the Avatar’s object variables.

The **main program** should create 4 different Avator objects that resemble 4 characters from the Super Mario series (https://en.wikipedia.org/wiki/Super_Mario). The program should create a game object ‘super-mario’ and the avatars should be added to the game and ‘animated’ once.

Note, that this assignment does not require any game engine or real animation of characters. The design should be similarly simple to the Dog example in class.

Each class should be in its own .py file, and the main.py should also be in its own .py file.

Deliverables

1. A or several .py files with all the code.

Due: Thursday, Feb 22 2022, 10pm via courses.maine.edu.

