

Surya Marimuthu

12-3-21

Professor Kuttivelli

CSE-20

10.1 Create Your Own Class

Class: Game

Github Link: [Create your own class](#)

Class Documentation

Description of the class:

- The class I chose was called game which is used for video games, consoles, and their prices. It has several methods that rate the user's favorite games, consoles, and their average price they pay for new video games. It includes rating methods and get-set methods to return certain ratings or display certain data attributes.

Description of the class variable:

- best_games: this is a list of the best video games (in my opinion) and is used for the title_rating method to give the user their rating out of 10.

Description of the data variables:

- title: this data variable represents the user's favorite video game and is used within the methods to return certain ratings.
- console: this data variable represents the user's favorite console and is used within the methods to return certain ratings
- price: this data variable represents the average price the user pays for a new video games and is used within the methods to return certain ratings

Description of the methods:

- **def __init__(self, title, console, price):** allows the class Game to initialize all the attributes within the class. This takes in the arguments: title, console, and price but does not return anything.
- **def console_rating(self, console):** this method takes in the console argument which is the user's favorite console. Based on the user's response it will return a rating out of 10.
- **def title_rating(self, title):** this method takes in the title argument which represents the user's favorite video game. Taking in the argument, the method will return a rating out of 10 based on if the video game title is in the best_games class variable. If it is in that list it returns a 10/10 rating, if not it returns a 5/10 rating.
- **def price_rating(self, price):** this method takes in the price argument which represents the average price the user spends on new video games. The method then returns a message based on how expensive the user's price is.
- **def set_title(self, title):** this is a set method which is the first part of the get-set method. It takes in the title argument, but does not return anything. Instead it sets self.__title = title
- **def set_price(self, price):** this is a set method which is the first part of the get-set method. It takes in the price argument, but does not return anything. Instead it sets self.__price = int(price).
- **def set_console(self, console):** this is a set method which is the first part of the get-set method. It takes in the console argument, but does not return anything. Instead it sets self.__console = console.

- **def get_title(self, title):** this is a get method which is the second part of the get-set method. It takes in the title argument and returns self.__title. This is used to access the set__title method.
- **def get_price(self, price):** this is a get method which is the second part of the get-set method. It takes in the price argument and returns self.__price. This is used to access the set__price method.
- **def get_console(self, console):** this is a get method which is the second part of the get-set method. It takes in the title argument and returns self.__console. This is used to access the set__console method.

Demo Program Documentation

Description: The demo program will judge the user based on their inputted responses. They will be asked to input their favorite video game, favorite console to play on, and the average price they pay for new games. Based on these results, the program will rate your responses. The best results will come with multiple attempts so the user can see all the possible outcomes. The program is self-explanatory and will tell you how to exit the program if needed as well. The demo program is just for fun so please don't take any of the ratings seriously!

Instructions: The instructions are simple, run the code and input your responses. There will be several commands to input that will rate your responses.