

## HOMEWORK 7 - Modules

### CHALLENGING VERSION

#### PART I

Complete Part I of the [Regular Homework](#) but with these twists:

- Add validation to the size attribute of Dog. If the program attempts to create a Dog object with an invalid size (not 'small', 'medium', or 'large'), prompt the user a maximum of 5 possible times for a valid size. If they don't give a valid size after 5 tries, randomly select a Dog size among the 3 valid sizes to assign to it.

#### PART II

Complete Part II of the [Regular Homework](#) but with these twists:

- Create a class called `GuessingGame` which has these properties (`max_int`, `min_int`, `target_int`, `total_guesses`) and at least these 3 methods (`GuessInt`, `Congratulate`, and `ShowFailedMsg`).
- Put the `GuessingGame` class in `guessing_game.py` and put `guessing_game.py` inside a directory called `games` which is your the week7 directory.
- In the week7 directory, create a file called `game_main.py` and import `guessing_game.py` to play the game.

#### PART III

Complete Part III of the [Regular Homework](#) but with these twists:

- In your week7 directory, create a directory named `shopping`
- Inside the `shopping` directory, create a file named `shopping_cart.py`
- Inside `shopping_cart.py`, create a class named `ShoppingCart` which has these properties (`groceries` (list), `total_cost`) and at least these 3 methods (`ChastiseUnderAge`, `RemoveAlcoholicItems`, `CalculateTotalCost`).
- Also inside the `shopping` directory, create a directory named `utilities`.
- Inside the `utilities` directory, create a file named `shop_values.py`. The `shop_values.py` module should have a single dictionary named `inventory` with all purchase-able items in the store. The keys are item names and the values are item prices.
- When `shop_values.py` is **run by itself**, it should iterate through the `inventory` dictionary printing out the name and price of each item.
- Also Inside the `utilities` directory, create a file named `alcohol.py`. The `alcohol` module should have a single list, `alcoholic_beverages`, that holds the 3 different alcohol strings ('beer', 'wine', 'liquor'). Import this module to check for alcohol.
- Back in week7, create a file named `shopping_main.py` which imports all necessary modules and runs the program as described in the assignment.