The Supermarket Checkout Kata

- In this section of the course I'll be performing another hands on TDD coding session.
- For this example I'll be implementing the Supermarket Checkout code Kata.

Overview

- Checkout Class that maintains a list of items that are being checked out.
- Checkout Class provides interfaces for:
  - Setting the price of individual items
  - Adding individual items to the check out.
  - The current total cost for all the items added.
  - Add an apply discounts on select items when N number are purchased.

- In this Kata I'll be implementing a checkout class that maintains a list of items that are being added during a checkout at a supermarket.
- This class should provide interfaces for:
- Setting the price on individual items
- Adding individual items to the checkout
- Calculating the current total cost from all the items that have been added
- Applying optional discount rules when there are N number of a specific item type (i.e. 3 for a dollar).

Test Cases

- Can create an instance of the Checkout class
- Can add an item price
- Can add an item
- Can calculate the current total
- Can add multiple items and get correct total
- Can add discount rules
- Can apply discount rules to the total
- Exception is Thrown for Item Added without a Price

- The Checkout class has the following test cases that I'll go through as I'm implementing the class with TDD.
- The first and simplest test case is for creating an instance of the Checkout class.
- Next is the ability to add an item price.
- Then adding an individual item to the list of checkout items.
- Then calculating the current total.
- Then adding multiple items and getting the correct total.
- Then the class needs the ability to add discount rules.
- Then the class needs to be able to apply the discount rules when calculating the total.
- And lastly the class needs to throw an exception when an item is added that doesn't have a defined Price
- Now I'm going to go ahead and setup a new PyCharm project for this Kata using my Python3 virtual environment that's been setup for PyTest.
- Then I'll verify I have the project setup properly and I'll implement the first test case.