**Shopping-Basket**

**Scenario 1 - Add items to shopping basket**

Given “*Apple, Apple, Orange, Apple, Pineapple, Banana, Orange, Banana* “

The system should count each individual item and obtain the price from the in-memory database, as well as impose any discounts and display the total. Information as follows:

~~~~~~~~~~~~~~~~ Shopping Basket ~~~~~~~~~~~~~~~~~~~~~

Apple = 3

Pineapple = 1

Orange = 2

Banana = 2

Apple Sub Total = 24.0

Pineapple Sub Total = 95.0

Orange Sub Total = 64.0

Banana Sub Total = 102.0

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Total = 285.0

**Acceptance criteria:**

* Shopping basket should be created when the first product is added.
* Shopping basket should be persisted (In-memory, DB later)
* Each user should have her own shopping basket.

Products available (in-memory repository):

Price List

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Item Price Per Item

Apple 12p

Orange 32p

Banana 51p

Pineapple 95p

We are calling Rest Controller as below :

HttpUrl.parse("http://localhost:2022/price").newBuilder().addQueryParameter("title", product.getName()).build().toString();

**Scenario 2 - Stock restriction**

* If there are not enough items available in stock for purchase, throw exception [PriceData is empty]

**Scenario 3 - Multi-buy discount**

The price should be obtained from an in-memory database, and any discounts should be applied and the total displayed. Information as follows:

* A multi-buy discount should be available in the shopping cart:
  + Apples are buy one get one free
  + Bananas are three for two

~~~~~~~~~~~~~~~~ Shopping Basket ~~~~~~~~~~~~~~~~~~~~~

Apple = 7

Orange = 3

Pineapple = 2

Banana = 2

Apple Sub Total = 48.0

Orange Sub Total = 64.0

Pineapple Sub Total = 190.0

Banana Sub Total = 102.0

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Total = 404.0

**Scenario 4 – Validations**

* Price and Quantity should be greater than zero
* Product not found in the system
* If any problem occurred in order to invoke “PriceEngineController” system will handle
* List files:

PriceEngineApplication = Spring Boot starter Application

PriceEngineController = RestController

getProductPrice : To get the product price

getAllProduct : To get all the products

ProductEngineServices = Business layer

ProductEngineServiceImpl = Business layer

ProductEngineDao = DB layer

ProductPrice = Bean

Title

price

InternalServerError = Exception Handling

ResourceNotFoundException

ServiceException

application.yml = H2 DB and Data Source details