**Requirement**

**Prerequisites/assumptions:**

1. Products are already listed in the store (you can add this hardcoded or read it from file)

2. Customers’ active days points initial totals are already listed in the store (you can havethis hardcoded or read from file or starting schema)

**The success scenario is as follows:**

1. Customer views all available products (API shows products including points costand codes)

2. The customer requests to purchase one or more of these products by1. Providing their unique ID2. Providing the list of product codes they want to purchase.

3. The store subtracts the total of the products’ points from the customer’s total andreturns OK if the customer has enough points to purchase the requested products.

**The alternate scenarios:**

1. The customer does not have enough points (return appropriate API return code andresult)

2. The customer did not provide any products to purchase

3. The customer chose a non-existent product code

4. The customer’s ID does not exist in the store.

**Used Technology Stack**

1. Java 8
2. Spring Boot 2.X.X
3. Hibernate/JPA
4. H2 Database [Embedded]
5. Swagger 2 [For API Information]
6. JSON

**Show All Customer**

Customer views all available products

* **URL** : /api/ril/allcustomers
* **Method:**

GET | POST

* **URL Params**

No Parameter Required

* **Success Response:**

Json response is generated by Rest web service which contains cutomer\_id, customer\_name , purchase\_points and purchased products.

* + **Code:** 200  
    **Content:**

**{**"customer\_id": **1**,

"cutomer\_name": "abc",

"purchase\_points": **1000**,

"cartProduct": **[]}**

* **Error Response:**
  + **Code:** 500 Server Error
* **Sample Call:**

<http://localhost:8080/api/ril/allcustomers>

**Show All Products**

Customer views all available products

* **URL** : /api/ril/allproducts
* **Method:**

GET | POST

* **URL Params**

No Parameter Required

* **Success Response:**

Json response is generated by Rest web service which contains product\_id, product\_name and price products.

* + **Code:** 200  
    **Content:**

**{**"product\_id": **1**,

"product\_name": "product1",

"price": **100}**

**Error Response:**

* + **Code:** 500 Server Error
* **Sample Call:**

http://localhost:8080/api/ril/allproducts

**Add Product to Customer Cart**

Customer can purchase any product from product list up to purchase point. If customer reach up to maximum purchase point. Cutomer unable to purchase product

* **URL** : /api/ril/ purchaseproduct/{cutomer id}/{product id}
* **Method:**

GET | POST

* **URL Params**

Required customer id and product id.

[Customer Id: Integer]

[Product Id: Integer]

* **Success Response:**

Receive String as response when successfully added into cart.

* + **Code:** 200  
    **Content:** Added to cart!

**Error Response:**

Invalid Customer Id : Unable to find com.ril.model.Customer with id 200   
Invalid Product Id : Unable to find com.ril.model.Product with id 220

Customer exceed purchase point : Customer product purchase point exceed!

* **Sample Call:**

<http://localhost:8080/api/ril/purchaseproduct/3/2>