**Case Study :** Create the Shopping Web Application which allows user to

1. Login into the application
2. View the products
3. Add the product in the shopping cart
4. Remove the products from the cart
5. Buy the products
6. Show final bill to the customer

**Web Application must consume the following Rest API’s .**

**catalog-service project**

public class Product {

private Long id; (Primary key)

private String code;

private String name;

private String description;

private double price;

}

public class ProductList {

private List<Product> products;

}

**Expose the following Rest API Resource**

@GetMapping - (path = "/products")

public List<Product> listAllProducts()

@GetMapping - (path = "/products /code /{productCode}")

public Optional<Product> getProductByCode(String productCode)

**inventory-service-project**

public class InventoryItem {

private Long id; (primary key)

private String productCode;

private Integer availableQuantity ;

}

public class InventoryItemList {

private List<InventoryItem> inventoryItems;

}

**Expose the following Rest API Resource**

@Get - (path = "/code/{productCode}")

public InventoryItem getInventoryItemByProductCode (String productCode)

@Put - (path = "/code/{productCode}/{ availableQuantity }")

public updateInventoryItemQuantityByProductCode(String productCode, int availableQuantity)

**order-service-project**

public class OrderItem {

private Long id;

private Long productId;

private int quantity;

private BigDecimal productPrice;

}

public class Order {

private Long id;

private String customerEmail;

private String customerAddress;

private List<OrderItem> items;

}

public class OrderList {

private List<Order> orders;

}

**Expose the following** **Rest API Resource**

@PostMapping - (path = "/orders")

pubic URL saveOder(Order order)

@GetMapping - (path = "/orders/{id}")

public Order findOrderById (Long id)