Execution Steps:

1. Start the ActiveMQ server:
   1. /Users/msreekak/Documents/order\_management\_system/tools/apache-activemq-5.11.1/bin/macosx/activemq start
2. Start the Registration Service:
   1. java -jar target/order-management-system-1.0.jar registration
3. Start the Products Catalog Service:
   1. java -jar target/order-management-system-1.0.jar product-catalog-service
4. Start the Pricing Service
   1. java -jar target/order-management-system-1.0.jar pricing-service
5. Start the Tax Service
   1. java -jar target/order-management-system-1.0.jar tax-service
6. Start the Order Service
   1. java -jar target/order-management-system-1.0.jar order-service
7. Start the Billing Service
   1. java -jar target/order-management-system-1.0.jar billing-service
8. Start the mailing Service
   1. java -jar target/order-management-system-1.0.jar mailing-service
9. Open Postman and execute the requests

API Documentation:

1. **Add Product:**

Returns json data of a product

* 1. URL:
     1. /products/v1/add
  2. HTTP Method:
     1. POST
  3. Request Body: application/json
     1. Required:
        1. "productName": [String]
        2. "productType": [String]
        3. "price": [Decimal]
  4. Success Response:
     1. Code: 200

Content: {"id": 10, "name": "SampleT1", "type": "PT8", "price": 108}

* 1. Error Response:
     1. Code: 404

Content: "Product Already Exists: {productName}"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2025/products/v1/add",

type : "POST",

data : {"productName": "SampleT1", "productType": "PT8", "price": 108}

success : function(r) {

console.log(r);

}

});

1. **Get Product:**

Returns json data of a product

* 1. URL:
     1. /products/v1/get
  2. HTTP Method:
     1. GET
  3. URL Params:
     1. Required:
        1. "id": [Long]
  4. Success Response:
     1. Code: 200

Content: {"id": 10, "name": "SampleT1", "type": "PT8", "price": 108}

* 1. Error Response:
     1. Code: 404

Content: " No products found: {id}"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2025/products/v1/get?id=1",

type : "GET",

success : function(r) {

console.log(r);

}

});

1. **Get Product Type:**

Returns json data of list of products

* 1. URL:
     1. /products/v1/type/
  2. HTTP Method:
     1. GET
  3. Path Params:
     1. Required:
        1. "productTyple": [String]
  4. Success Response:
     1. Code: 200

Content: [{"id": 10, "name": "SampleT1", "type": "PT8", "price": 108}]

* 1. Error Response:
     1. Code: 404

Content: " ProductType not found: {productType}"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2025/products/v1/type/PT1",

type : "GET",

success : function(r) {

console.log(r);

}

});

1. **List Products:**

Returns json data of list of products

* 1. URL:
     1. /products/v1/list
  2. HTTP Method:
     1. GET
  3. URL Params:
     1. Optional:
        1. "page": [Integer]
        2. "size": [Integer]
  4. Success Response:
     1. Code: 200

Content: {"total": 1, "page": 0, "size": 30, "products": [{"id": 1, "name": "P1", "type": "PT1", "price": 26616.08}]}

* 1. Error Response:
     1. Code: 404

Content: "No products found"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2025/products/v1/list",

type : "GET",

success : function(r) {

console.log(r);

}

});

1. **Get Price Quote:**

Returns json data of product price

* 1. URL:
     1. /pricing/v1/
  2. HTTP Method:
     1. GET
  3. Path Params:
     1. Required:
        1. " productId": [Long]
  4. Success Response:
     1. Code: 200

Content: 26616.08

* 1. Error Response:
     1. Code: 404

Content: "No products found: {productId}"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2028/pricing/v1/1",

type : "GET",

success : function(r) {

console.log(r);

}

});

1. **Define Tax to Product Type:**

Returns json data of tax definition

* 1. URL:
     1. /tax/v1/define
  2. HTTP Method:
     1. POST
  3. Request Body:
     1. Required:
        1. " productType": [String]
        2. " location": [String]
        3. " taxPercent": [Decimal]
  4. Success Response:
     1. Code: 200

Content: {"id":1, "productType": "PT3", "location": "IND", "taxPercent": 7.2}

* 1. Error Response:
     1. Code: 404

Content: "ProductType not found: {productType}"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2028/tax/v1/define",

data: {"productType": "PT3", "location": "IND", "taxPercent": 7.2}

type : "POST",

success : function(r) {

console.log(r);

}

});

1. **Add Order:**

Returns json data of order

* 1. URL:
     1. /order/v1/add
  2. HTTP Method:
     1. POST
  3. Request Body:
     1. Required: Array of below entites
        1. " productId": [Long]
        2. " Quantity": [Integer]
  4. Success Response:
     1. Code: 200

Content: {"id": {"orderId": 1, "productid": 1},"quantity": 4}

* 1. Error Response:
     1. Code: 404

Content: "No products found: {productid}"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2028/order/v1/add",

data: {"products": [{"productId":1, "quantity": 2}]}

type : "POST",

success : function(r) {

console.log(r);

}

});

1. **Generate Bill:**

Returns json data of order

* 1. URL:
     1. /billing/v1/generateBill
  2. HTTP Method:
     1. POST
  3. Request Body:
     1. Required:
        1. "orderId": [Long]
        2. "billingAddress": [String]
        3. "location": [String]
        4. "customerName": [String]
        5. "emailId": [String]
  4. Success Response:
     1. Code: 200

Content: {"billid": 1, "createdDate": 21 Jan,2018, "billingAddress": sample, "location": IND, "emailId": sample, "itemsBilled": [{"name": P1, "quantity": 4, "price": 100, "tax": 12, "total": 102}],"totalAmount": 123}

* 1. Error Response:
     1. Code: 404

Content: "No products found: {productid}"

* + 1. Code: 404

Content: "No taxes found for productType: {productType}"

* + 1. Code: 404

Content: "No order found: {orderId}"

* 1. Sample Call:

$.ajax({

url: "http://localhost:2028/billing/v1/generateBill",

data: {"orderId": 1, "billingAddress": "12345 Sunny Road", "location": "IND", "customerName": "Customer ABC", emailId": "mani.rgm448@gmail.com"}

type : "POST",

success : function(r) {

console.log(r);

}

});