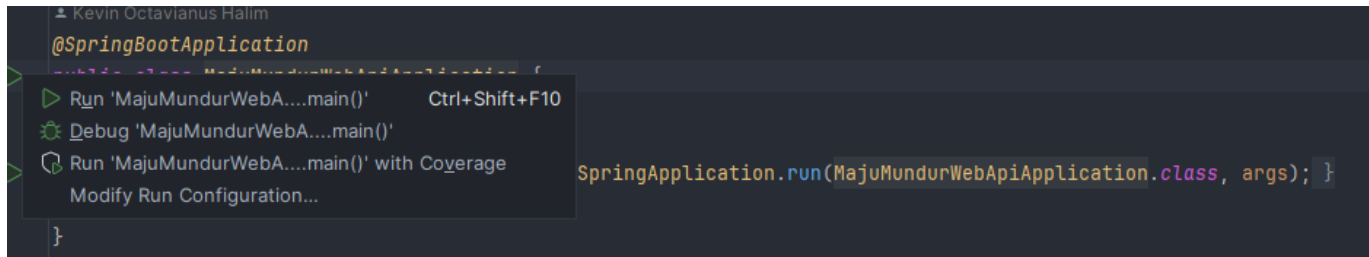


## Demo Application

### Jalankan Main Class / Program



```
Tomcat started on port 8080 (http) with context path ''  
Started MajuMundurWebApiApplication in 5.534 seconds (process running for 5.9)
```

Dapat terlihat bahwa port web api adalah 8080, maka URL untuk membuka Webnya adalah <http://localhost:8080/>

## Buka Swagger UI

<http://localhost:8080/api/swagger/swagger-ui/index.html>

The screenshot shows the Swagger UI interface in a web browser. The browser's address bar displays the URL `www.localhost:8080/api/swagger/swagger-ui/index.html`. The Swagger UI header includes the Swagger logo, a search bar containing `/v3/api-docs`, and an **Explore** button. Below the header, the main title is **Maju Mundur Web API** with version **1.0** and **OAS 3.0** tags. A subtitle reads "OpenApi Documentation for Maju Mundur Web API", and there is a link to the [Terms of service](#). The **Servers** section shows a dropdown menu with `http://localhost:8080 - Local Server` and an **Authorize** button. The API endpoints are organized into three sections: **Customer Controller** (Controller To Get Customer Details), **Authentication Controller** (Controller To Register As Customer, Register As Merchant, and Login), and **Merchants Controller** (Controller To Get Merchant Details by Id, Create, Update , & Delete New Product, View Merchant's Product List). Each section lists its endpoints with their HTTP methods, paths, descriptions, and security status (locked/unlocked).

**Servers**

`http://localhost:8080 - Local Server` **Authorize**

### Customer Controller

Controller To Get Customer Details

Method	Path	Description	Security
GET	<code>/api/customers/{customerId}</code>	Get Customer's Details	Locked

### Authentication Controller

Controller To Register As Customer, Register As Merchant, and Login

Method	Path	Description	Security
POST	<code>/auth/register-as-merchant</code>	Register As Merchant	Locked
POST	<code>/auth/register-as-customer</code>	Register As Customer	Locked
POST	<code>/auth/login</code>	Login	Locked

### Merchants Controller

Controller To Get Merchant Details by Id, Create, Update , & Delete New Product, View Merchant's Product List

Method	Path	Description	Security
PUT	<code>/api/merchants/{merchantId}/update-product</code>	Update Product MERCHANTS OR SUPER_ADMIN ONLY	Locked

## View Available Rewards

### Rewards Controller

Controller To Create New Rewards, View All Rewards, Redeem Rewards



GET

/api/rewards View All Rewards



Get All Reward's Stored Data

#### Parameters

Try it out

No parameters

#### Responses

Code	Description	Links
200	OK	No links

Media type

\*/\*

Controls Accept header.

Example Value | Schema

```
{
  "statusCode": 0,
  "message": "string",
  "data": {}
}
```

## Output

Code Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": [
    {
      "rewardsId": "54026ce5-e0dc-4b68-8dca-96802ced93fa",
      "rewardsCode": "B",
      "rewardsName": "Reward B",
      "requiredPoints": 40
    },
    {
      "rewardsId": "924e1778-6c94-43c5-8b9a-291cf3fc06c0",
      "rewardsCode": "A",
      "rewardsName": "Reward A",
      "requiredPoints": 20
    }
  ]
}
```



Download

## Merchant's Flow

### Register As Merchant



## Authentication Controller

Controller To Register As Customer, Register As Merchant, and Login

POST

/auth/register-as-merchant

Register As Merchant



Register As A Merchant and Gain Role AS MERCHANT

Parameters

Try it out

No parameters

Request body required

application/json

▼

Example Value

Schema

```
{
  "name": "Toko Merdeka Official Store",
  "phoneNumber": "+628123456789",
  "email": "merchant123@gmail.com",
  "password": "Merchant123"
}
```


Code

Details

200

Response body

```
{
  "statusCode": 201,
  "message": "Created",
  "data": {
    "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
    "merchantName": "Toko Merdeka Official Store",
    "merchantPhoneNumber": "+628123456789",
    "merchantEmail": "merchant123@gmail.com",
    "role": "ROLE_MERCHANT"
  }
}
```






Download

## Login

POST

/auth/login

Login



Login to Get Token

Parameters

Cancel


Reset


No parameters

Request body required

application/json

```
{
  "email": "merchant123@gmail.com",
  "password": "Merchant123"
}
```

Code	Details
200	<div>Response body</div> <pre>{   "statusCode": 200,   "message": "OK",   "data": "Token: eyJhbGciOiJIUzUxMiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJtYWp1TXVuZHVyQVBjIiwic3ViIjoizjV1MGQyNmQTYTE5O00ZjcxLk1k1YjgtY2JjYTM1YmJhYyU2IiwiaXNjaXNzE1NDk1NDQ4LjYyY2x1cyI6IHYjST0xX0F1UkNIQU5UI119.gqMTEyU11c1f7jM5_7hYxZcGvZ1qqJVCwrrjDufJrLwvcjX9xPenmI0iht2i4yXdcgozgZVBnbUqsf1dbjdLw" }</pre> <div> <a href="#">Download</a></div>

Simpan Token dengan cara Copy & Paste response Token pada logo Lock  di pojok kanan atas.

Available authorizations

bearerAuth (http, Bearer)

JWT auth description

Value:

/XdcgozgZVBnbUqsf1dbjdLw

Authorize

Close

Setelah Authorize maka Logo Lock tadinya akan berubah menjadi

## Create New Product

**POST** `/api/merchants/{merchantId}/add-product` Create New Product MERCHANTS OR SUPER\_ADMIN ONLY

Create A Product, MERCHANTS OR SUPER\_ADMIN ONLY !!

Parameters

Try it out

Name	Description
<b>merchantId</b> * required string (path)	<input type="text" value="merchantId"/>


Request body required

application/json


Example Value | Schema

```
{
  "code": "PRD001",
  "name": "Laptop Asus ROG",
  "description": "Best Gaming Laptop in The Century",
  "price": 35000
}
```

Gunakan merchantId yang tadi muncul pada ResponseBody saat selesai Register atau bisa juga akses database langsung untuk mendapatkan ID merchant.

Code	Details
200	<div>Response body</div> <div><pre>{   "statusCode": 201,   "message": "Created",   "data": {     "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",     "merchantName": "Toko Merdeka Official Store",     "productId": "02020216-d608-49d8-84d5-bde4d80dbd09",     "productCode": "PRD001",     "productName": "Laptop Asus ROG",     "productDescription": "Best Gaming Laptop in The Century",     "productPrice": 35000   } }</pre></div> <div> <a href="#">Download</a></div>

Mari buat 1 produk lagi

Code	Details
200	<div>Response body</div> <div><pre>{   "statusCode": 201,   "message": "Created",   "data": {     "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",     "merchantName": "Toko Merdeka Official Store",     "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",     "productCode": "PRD002",     "productName": "Laptop Lenovo ThinkPad",     "productDescription": "Most Recommended Work &amp; Gaming Laptop",     "productPrice": 7500000   } }</pre></div> <div> <a href="#">Download</a></div>

## Melihat Product List Yang Dimiliki Merchant

**GET** `/api/merchants/{merchantId}/products` View Product List

View Product List by It's Merchant Id

**Parameters** Try it out


Name	Description
page integer(\$int32) (query)	Default value : 0 <input type="text" value="0"/>
size integer(\$int32) (query)	Default value : 5 <input type="text" value="5"/>
<b>merchantId</b> * required string (path)	<input type="text" value="merchantId"/>

**Code** **Details**

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "totalElements": 2,
    "totalPages": 1,
    "currentPage": 0,
    "size": 5,
    "data": [
      {
        "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
        "productId": "02020216-d608-49d8-84d5-bde4d80dbd09",
        "name": "Laptop Asus ROG",
        "code": "PRD001",
        "description": "Best Gaming Laptop in The Century",
        "price": 35000
      },
      {
        "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
        "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
        "name": "Laptop Lenovo ThinkPad",
        "code": "PRD002",
        "description": "Most Recommended Work & Gaming Laptop",
        "price": 7500000
      }
    ]
  }
}
```


 **Download**

Apabila Size saya ubah menjadi 1, maka setiap page hanya akan menampilkan 1 buah data.

200




Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "totalElements": 2,
    "totalPages": 2,
    "currentPage": 0,
    "size": 1,
    "data": [
      {
        "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
        "productId": "02020216-d608-49d8-84d5-bde4d80dbd09",
        "name": "Laptop Asus ROG",
        "code": "PRD001",
        "description": "Best Gaming Laptop in The Century",
        "price": 35000
      }
    ]
  }
}
```

 **Download**

## Update Product

**PUT** `/api/merchants/{merchantId}/update-product`



Update Product MERCHANTS OR SUPER\_ADMIN ONLY

Update A Product, MERCHANTS OR SUPER\_ADMIN ONLY !!

Parameters

Try it out

Name	Description
<b>merchantId</b> * required string (path)	<input type="text" value="merchantId"/>

Request body required

application/json

Example Value | Schema

```
{
  "productId": "string",
  "code": "PR001",
  "name": "Laptop HP Envy",
  "description": "Most Recommended Laptop For Gaming & Work",
  "price": 65000
}
```


Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
    "merchantName": "Toko Merdeka Official Store",
    "productId": "02020216-d608-49d8-84d5-bde4d80dbd09",
    "productCode": "PR001",
    "productName": "Laptop HP Envy",
    "productDescription": "Most Recommended Laptop For Gaming & Work",
    "productPrice": 65000
  }
}
```



Download

Mari lihat perubahannya


Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "totalElements": 2,
    "totalPages": 1,
    "currentPage": 0,
    "size": 5,
    "data": [
      {
        "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
        "productId": "02020216-d608-49d8-84d5-bde4d80dbd09",
        "name": "Laptop HP Envy",
        "code": "PR001",
        "description": "Most Recommended Laptop For Gaming & Work",
        "price": 65000
      },
      {
        "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
        "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
        "name": "Laptop Lenovo ThinkPad",
        "code": "PRD002",
        "description": "Most Recommended Work & Gaming Laptop",
        "price": 7500000
      }
    ]
  }
}
```



Download



## Delete Product

DELETE

/api/merchants/{merchantId}/products/{productId}  
Delete A Product MERCHANTS OR SUPER\_ADMIN ONLY

Delete A Product By It's Product Id, MERCHANT OR SUPER\_ADMIN ONLY !!

Parameters

Cancel

Name	Description
<b>productId</b> * required string (path)	02020216-d608-49d8-84d5-bde4d80dbd09
<b>merchantId</b> * required string (path)	80f1d56b-5fe5-45eb-a057-4bb36c5484c7

Execute

Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": "Product Deleted"
}
```

Download

Mari lihat perubahannya

Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "totalElements": 1,
    "totalPages": 1,
    "currentPage": 0,
    "size": 5,
    "data": [
      {
        "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
        "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
        "name": "Laptop Lenovo ThinkPad",
        "code": "PRD002",
        "description": "Most Recommended Work & Gaming Laptop",
        "price": 7500000
      }
    ]
  }
}
```

Download




## Customers Flow

### Register As Customer

POST

/auth/register-as-customer

Register As Customer



Register As A Customer and Gain Role AS CUSTOMER

Parameters

Try it out

No parameters

Request body required

application/json

Example Value | Schema

```
{
  "name": "Kevin Halim",
  "phoneNumber": "+62899012345",
  "birthDate": "2000-12-31",
  "email": "customer123@gmail.com",
  "password": "Customer123"
}
```


Code

Details

200

Response body

```
{
  "statusCode": 201,
  "message": "Created",
  "data": {
    "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
    "customerName": "Kevin Halim",
    "customerPhoneNumber": "+62899012345",
    "customerBirthDate": "2000-12-31",
    "customerEmail": "customer123@gmail.com",
    "customerPoints": 0,
    "role": "ROLE_CUSTOMER"
  }
}
```

 Download

## Login As Customer

**POST** /auth/login Login

Login to Get Token

**Parameters** Cancel Reset

No parameters

**Request body** required application/json

```
{
  "email": "customer123@gmail.com",
  "password": "Customer123"
}
```

**Code** **Details**

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": "Token: eyJhbGciOiJIUzUxMiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJtYVp1TXVudmVzQVBJIiwic3ViIjoizDlmZWE3YzAtNmZiMC00MGNhLWEzYzgtMmM3MDIjYzEyZGR1IiwiaXNzE1NDk3MDMwLCJyb2x1cyI6WyJST0xFX0NVU1RPTUVSI19.7bs08T_qfo5b1zU-bTgm1e7b8Ne_u4FwY3GwLedrJwP17Wf06ksZgHsXt0vMsCF0S2873zCoGi3XbG-YNJPjA"
}
```

Download

Lakukan hal yang sama seperti saat login as Merchant yaitu dengan Copy & Paste Token pada response di Authorization Lock.

**Available authorizations** X

**bearerAuth (http, Bearer)**

JWT auth description

Value:

OS2873zCoGi3XbG-YNJPjA




Authorize Close

## Melihat Product List Milik Merchant

GET

/api/merchants/{merchantId}/products

View Product List



View Product List by It's Merchant Id

Parameters

Cancel

Name	Description
page integer(\$int32) (query)	<input type="text" value="0"/>
size integer(\$int32) (query)	<input type="text" value="5"/>
merchantId * required string (path)	<input type="text" value="80f1d56b-5fe5-45eb-a057-4bb36c5484c7"/>

Execute

Clear

Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "totalElements": 1,
    "totalPages": 1,
    "currentPage": 0,
    "size": 5,
    "data": [
      {
        "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
        "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
        "name": "Laptop Lenovo ThinkPad",
        "code": "PRD002",
        "description": "Most Recommended Work & Gaming Laptop",
        "price": 7500000
      }
    ]
  }
}
```



Download

## Create Transaction

**POST** `/api/transactions` Create A Transaction CUSTOMER OR SUPER\_ADMIN ONLY

Create New Transaction, CUSTOMER OR SUPER\_ADMIN ONLY !!

**Parameters** Cancel

No parameters

**Request body** required application/json

```
{
  "merchantId": "string",
  "customerId": "string",
  "productId": "string"
}
```

Execute

**Request body** required application/json

```
{
  "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
  "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
  "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d"
}
```


Earned Points didapatkan dari Price / 1.000, sehingga untuk setiap kelipatan 1.000 customer mendapatkan 1point. Perhitungan point bisa diubah dalam codingan dengan mudah jika diperlukan.

**Code** **Details**

200

Response body

```
{
  "statusCode": 201,
  "message": "Created",
  "data": {
    "transactionDate": "Sun May 12 13:49:53 WIB 2024",
    "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
    "merchantName": "Toko Merdeka Official Store",
    "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
    "customerName": "Kevin Halim",
    "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
    "productCode": "PRD002",
    "productName": "Laptop Lenovo ThinkPad",
    "price": 7500000,
    "earnedPoints": 7500
  }
}
```

 **Download**

## View Customer's Details

### Customer Controller

Controller To Get Customer Details

GET /api/customers/{customerId} Get Customer's Details

Get A Customer's Details

Parameters

Name	Description
<b>customerId</b> * required	
string	
(path)	4a3a5c48-d935-4339-9065-f445a1ae972c

Cancel

Execute

Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
    "name": "Kevin Halim",
    "phoneNumber": "+62899012345",
    "birthDate": "2000-12-31",
    "email": "customer123@gmail.com",
    "currentPoints": 7500
  }
}
```

Download

Mari buat 1 transaksi lagi dengan input yang sama seperti sebelumnya

Code

Details

200

Response body

```
{
  "statusCode": 201,
  "message": "Created",
  "data": {
    "transactionDate": "Sun May 12 13:52:48 WIB 2024",
    "merchantId": "80f1d56b-5fe5-45eb-a057-4bb36c5484c7",
    "merchantName": "Toko Merdeka Official Store",
    "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
    "customerName": "Kevin Halim",
    "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
    "productCode": "PRD002",
    "productName": "Laptop Lenovo ThinkPad",
    "price": 7500000,
    "earnedPoints": 7500
  }
}
```

Download

Mari kita lihat perubahan point milik customer saat ini setelah terjadi transaksi baru

Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": {
    "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
    "name": "Kevin Halim",
    "phoneNumber": "+62899012345",
    "birthDate": "2000-12-31",
    "email": "customer123@gmail.com",
    "currentPoints": 15000
  }
}
```

Download

Melihat Customer Yang Pernah Berbelanja

Transactions Controller

Controller To Create Transaction, View All Transactions

GET

/api/transactions

View Customer's History CUSTOMER, MERCHANT, OR SUPER\_ADMIN ONLY

^

View Customer's Transaction History, CUSTOMER, MERCHANT, OR SUPER\_ADMIN ONLY

Parameters

Cancel

No parameters

Execute

Clear

Code

Details

200

Response body

```
{
  "statusCode": 200,
  "message": "OK",
  "data": [
    {
      "transactionDate": "2024-05-12 13:49:53.959",
      "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
      "customerName": "Kevin Halim",
      "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
      "productName": "Laptop Lenovo ThinkPad",
      "productCode": "PRD002",
      "salesPrice": 7500000
    },
    {
      "transactionDate": "2024-05-12 13:52:48.916",
      "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
      "customerName": "Kevin Halim",
      "productId": "e75ae895-2898-4bdb-be9b-e7eb4adc723d",
      "productName": "Laptop Lenovo ThinkPad",
      "productCode": "PRD002",
      "salesPrice": 7500000
    }
  ]
}
```

Download

Redeem Reward

POST

/api/rewards/redeem

Redeem A Reward CUSTOMER OR SUPER\_ADMIN ONLY

Redeem A Rewards Based On Available Rewards, CUSTOMER OR SUPER\_ADMIN ONLY

Parameters

Try it out

Name	Description
<b>customerId</b> * required string (query)	<input type="text" value="customerId"/>
<b>rewardId</b> * required string (query)	<input type="text" value="rewardId"/>

POST

/api/rewards/redeem

Redeem A Reward CUSTOMER OR SUPER\_ADMIN ONLY

Redeem A Rewards Based On Available Rewards, CUSTOMER OR SUPER\_ADMIN ONLY

Parameters

Cancel

Name	Description
<b>customerId</b> * required string (query)	<input type="text" value="4a3a5c48-d935-4339-9065-f445a1ae972c"/>
<b>rewardId</b> * required string (query)	<input type="text" value="54026ce5-e0dc-4b68-8dca-96802ced93fa"/>

Execute

Clear

Code

Details

200

Response body

```
{
  "statusCode": 201,
  "message": "Created",
  "data": {
    "purchaseDate": "Sun May 12 14:10:38 WIB 2024",
    "pointSpent": 40,
    "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
    "customerName": "Kevin Halim",
    "customerCurrentPoints": 22460,
    "rewardId": "54026ce5-e0dc-4b68-8dca-96802ced93fa",
    "rewardName": "Reward B"
  }
}
```

Download

Code

Details

200

Response body

```
{
  "statusCode": 201,
  "message": "Created",
  "data": {
    "purchaseDate": "Sun May 12 14:11:07 WIB 2024",
    "pointSpent": 20,
    "customerId": "4a3a5c48-d935-4339-9065-f445a1ae972c",
    "customerName": "Kevin Halim",
    "customerCurrentPoints": 22440,
    "rewardId": "924e1778-6c94-43c5-8b9a-291cf3fc06c0",
    "rewardName": "Reward A"
  }
}
```

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