API DOCUMENTATION

I. CONCEPT / FLOW

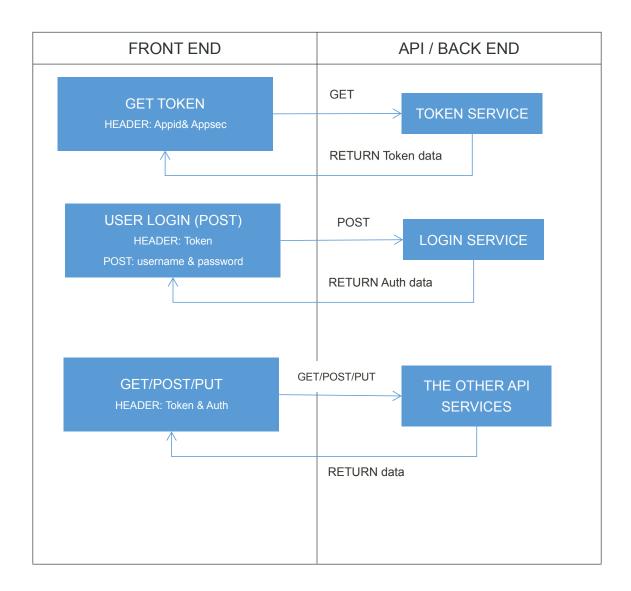| FRONT END	API / BACK END
GET TOKEN HEADER: Appid& Appsec	GET → **TOKEN SERVICE** RETURN Token data
USER LOGIN (POST) HEADER: Token POST: username & password	POST → **LOGIN SERVICE** RETURN Auth data
GET/POST/PUT HEADER: Token & Auth	GET/POST/PUT → **THE OTHER API SERVICES** RETURN data

II. DESIGN DATABASE

Design database can see in here:

https://dbdiagram.io/d/5c12dfc1b14359001447603d

1. appIdentifier Table

This table is to manage what apps that will be connect with our API.

We can disable the app when there is issue on security.

2. **users Table**

   This table is to manage our users. Without login we will refused the API connection.

3. **roles Table**

   This table is to manage module access role. For example root will be have full access for our app modules.

4. **Product Table**

   This table to store our product and calculate the tax.

III. **HOW TO USE API**

   Base URL: http://localhost:8801/index.php

   phpMyAdmin URL: http://localhost:8802

   phpMyAdmin Account
   Username: testuser
   Password: passw0rd

   Please use the postman collection to try the API.

   There are three (3) steps to use API:
   ■ **Get Token**
   ■ **User Login (Auth)**
   ■ **Access/Explore API**

   I use JWT technology for Token and User Login (Auth).

1. **Get Token**

   We need **App Id** and **App Secret** to get token and passed it in the header. Currently I already setup the appIdentifier account like below:
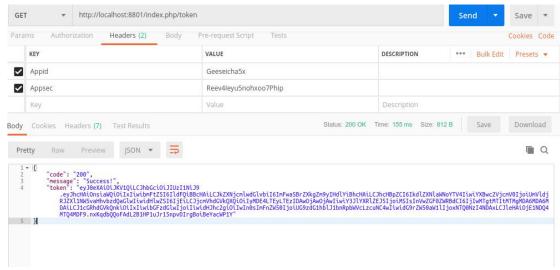   **App Id:** Geeseicha5x
   App Secret: Reev4Ieyu5nohxoo7Phip

   http://localhost:8801/index.php/token

Header params:
Appid: Geeseicha5x
Appsec: Reev4Ieyu5nohxoo7Phip

Please copy paste the token data into header to use Login and explore the other services.

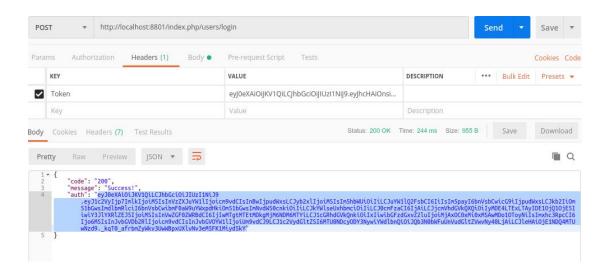2. **User Login**
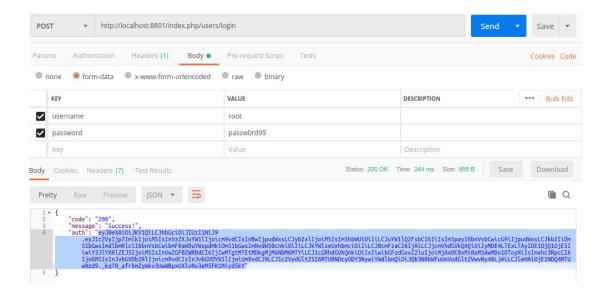   http://localhost:8801/index.php/users/login

    Header params:
    Token: {token}

    POST Data:
    Username: root
    Password: passw0rd99

3. Access/Explore API

Explore all API services need **Token** and **Auth** in header payload. So please copy and paste the **auth** that we get from login process.
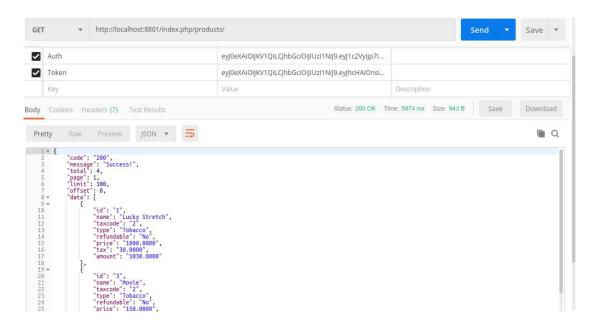
Explore Products

http://localhost:8801/index.php/products/

Header params:

Token: {token}

Auth: {auth}

API QUERY STRING

1. PAGING SYSTEM

Page: p
Limit: limit
Offset: offset

```
{
     "code": "200",
     "message": "Success!",
     "total": 4,
     "page": 1,
     "limit": 10,
     "offset": 0,
     "data": [
          {
               "id": "1",
               "name": "Lucky Stretch",
               "taxcode": "2",
               "type": "Tobacco",
               "refundable": "No",
               "price": "1000.0000",
               "tax": "30.0000",
               "amount": "1030.0000"
          },
          {
               "id": "3",
               "name": "Movie",
               "taxcode": "2",
               "type": "Tobacco",
               "refundable": "No",
               "price": "150.0000",
               "tax": "13.0000",
               "amount": "163.0000"
          },
          {
               "id": "4",
               "name": "Djarum Super 12",
               "taxcode": "2",
```

```
                    "type": "Tobacco",
                    "refundable": "No",
                    "price": "20.0000",
                    "tax": "10.4000",
                    "amount": "30.4000"
                },
                {
                    "id": "5",
                    "name": "KFC Super Besar",
                    "taxcode": "3",
                    "type": "Entertainment",
                    "refundable": "No",
                    "price": "20.0000",
                    "tax": "0.0000",
                    "amount": "20.0000"
                }
            ],
            "subtotprice": "1190.00",
            "subtottax": "53.4000",
            "grandtot": "1243.4000"
        }
```

2. SEARCHING/FILTER

http://localhost:8801/index.php/products/?p=1&limit=10&offset=0&s[trash][eq]=0

Use **s** param for searching/filter.

s[trash][eq]=0 => searching data with trash = 0

eq = equal
neq = not eaqual
lt = less than

gt = greater than

lte = less than equal

gte = greater than equal

like = like

3. **SORTING**

   http://localhost:8801/index.php/products/?p=1&limit=10&offset=0&s[trash][eq]=0&sort[id]=asc

   Use **sort** param for sorting.

   sort[id]=asc mean sorting by id Ascending

   sort[id]=desc mean sorting by id Descending

4. **OTHERS**

   Actually the API already designed to allow access/explore API without login. Sometimes we need without login user can explore our products.

5. **CREDIT**

   This API using **Phil Sturgeon, Chris Kacerguis** library REST API for the core system.

   https://github.com/chriskacerguis/codeigniter-restserver