

Contents

- 1 Introduction:..... 2
- 2 Register User 2
 - 1. Functional Specification: 2
 - 2. Service Operations: 2
- 3 Login User 3
 - 1. Functional Specification: 3
 - 2. Service Operations: 3
- 4 Register Device 4
 - 1. Functional Specification: 4
 - 2. Service Operations: 4
- 5 List All Devices 4
 - 1. Functional Specification: 4
 - 2. Service Operations: 5
- 6 Authentication & Authorization 5

1 Introduction:

This service aims to provide register electronic devices to system. In order to register electronic devices user must have register itself to a system first.

2 Register User

1. Functional Specification:

| | |
|---------------------|--|
| Service Name | Register User |
| Service Description | This service allow the user to registers to the system |
| HTTP METHOD | Post |
| Endpoint | http://localhost:8081/auth/register |

2. Service Operations:

1. INPUT PARAMETERS

| Name | Type | Length | Optional | Description |
|----------|--------|--------|----------|---------------|
| name | String | | NO | Name Of user |
| email | String | | NO | Email address |
| password | String | | NO | Password |

2. Sample input

```
{
  "name": "Terminus Group",
  "email": "test1@gmail.com",
  "password": "test123"
}
```

3. OUTPUT JSON

Result will be JSON objects.

Operation Response

```
{
  "status": 200,
  "message": "user created successfully",
  "code": "successful",
  "data": "Terminus Group"
}
```

Note: - Basic authentication is required to use this service (Refer to Authentication and Authorization)

3 Login User

1. Functional Specification:

| | |
|---------------------|---|
| Service Name | Login User |
| Service Description | This service allow the user to login to the system. The response will be token which will be used to call another API throughout the service. |
| HTTP METHOD | POST |
| Endpoint | http://localhost:8081/oauth/token |

2. Service Operations:

1 INPUT PARAMETERS

| Name | Type | Length | Optional | Description |
|--------------|--------|--------|----------|------------------|
| grant_type _ | String | | NO | - |
| username | String | | NO | Email of user |
| password | String | | NO | Password of user |

2 Sample input

Form Data

grant_type password
username test1@gmail.com
password 123456

3 OUTPUT JSON

Result will be JSON objects.

Operation Response

```
{  
  "access_token": "ed740626-edbc-43fb-b405-dfd34db72a86",  
  "token_type": "bearer",  
  "refresh_token": "55967444-e79c-4129-981d-1d962d482427",  
  "expires_in": 147643,  
  "scope": "read write"  
}
```

Note: - 1.Basic authentication is required to use this service (Refer to Authentication and Authorization)
2. Input parameters must be a form data

4 Register Device

1. Functional Specification:

| | |
|---------------------|--|
| Service Name | Register User |
| Service Description | This service allow logged in user to register the device to system |
| HTTP METHOD | POST |
| Endpoint | http://localhost:8081/api/v2.0/devices/register |

2. Service Operations:

1 INPUT PARAMETERS

| Name | Type | Length | Optional | Description |
|------|--------|--------|----------|----------------|
| imei | String | | NO | Imei of device |
| sim | String | | NO | Sim of device |

2 Sample input

```
{
  "imei": "12345678",
  "sim": "0565697710"
}
```

3 OUTPUT JSON

Result will be JSON objects.

```
{
  "status": 200,
  "message": "Device Register successfully in database",
  "code": "successful",
  "data": "1"
}
```

Note: - Authorization token is required to use this service (Refer to Authentication and Authorization)

5 List All Devices

1. Functional Specification:

| | |
|---------------------|---|
| Service Name | Get all registered devices |
| Service Description | This service will list all device that are registered to the system |
| HTTP METHOD | POST |
| Endpoint | http://localhost:8081/api/v2.0/devices/listalldevices |

2. Service Operations:

1. INPUT PARAMETERS

No input parameters are required for this service

2. OUTPUT JSON

Result will be the list of JSON objects.

```
[
  {
    "id": 1,
    "imei": "123456789",
    "sim": "0565697710",
    "enable": true,
    "configured": false
  },
  {
    "id": 2,
    "imei": "12345678",
    "sim": "0565697710",
    "enable": true,
    "configured": false
  }
]
```

Note: - Authorization token is required to use this service (Refer to Authentication and Authorization)

6 Authentication & Authorization

Register user and **Login user** API must include the user id and password with a colon ":" separated base64 encoded and send this information in the request header as shown below.

For example: user id is john and password is abc123 then encode the string "john:abc123" to base64

Requests include the header name "Authorization" with value starts with " Basic " and concatenate with encoded string in the header as shown below.

```
Authorization: Basic bG9sOnNlY3VyZQ==
```

Other than login and register all API must include authorization token shown below in request header.

```
Authorization: Bearer ed740626-edbc-43fb-b405-dfd34db72a86
```