

## **Purpose**

Defining the REST API specifications and the database Schema.

## **Main Activities**

1. create, list Devices

## **Non-functional requirements**

1. NodeJS Environment and programming language is TypeScript.
2. System is running inside a Docker container.
3. System is using mongoDB.

## 1.API Definition

### Devices resource

- 1- Get Devices
- 2- Add Device

### Users resource

	Action	Method	Resource URL	Success Code	Error Code
1	Get Devices	GET	/ Devices	200	500, 404
2	Get Device	GET	/ Devices /:deviceId	200	500, 404
3	Add Device	POST	/ Devices	201	500, 400

### Status codes:

#### 2xx (success category)

- 1- 200 ok: representing success for GET method.
- 2- 201 created: representing success for a new resource created for a POST method.

#### 4xx (Client Error Category)

- 1- 400 Bad Request: The client send a request with a missing param or a request that doesn't fulfill the API exposed by the server.
- 2- 404 Not Found: indicates that the requested resource does not exist.

#### 5XX(Server Error Category)

- 1- 500 internal server error: the request is valid from the client but the error occurred when the server tried to process the request.

## 2. Mongo Database

### Collection Device

Scope:

Store data about Device

Schema:

```
{  
  deviceId: uuid  
  name: String,  
  firmwareVersion: String,  
  firmwareRersion: String,  
}
```