

API for Smart-LED

This document divide to 3 part

- 1) sensor
- 2) LED
- 3) front-end

1) sensor

To update data use post request to <https://led-api.herokuapp.com/sensor> endpoint with data in JSON format as following

JSON representation

```
{
  "brightness": 10,
  "color": "#fcba03"
}
```

brightness accepted int more than 0 can over 100 (in LUX)
describe brightness detect by sensor
(if lux more than 9999 it will set to 9999 automatically)

color accepted string start with # follow by 6 character between 0-f (hex Color)
describe color detect by sensor

if your json correct it will response status 201 and JSON that update to server
else will response status 400 and plain-text about error

2) LED

To get data for your LED use get request to <https://led-api.herokuapp.com/led> endpoint
it will response status 200 and JSON format as following

JSON representation

```
{
  "brightness": 10,
  "color": "#fcba03"
}
```

brightness value between 20-100 describe brightness of led
color describe color of led in hex color

You can use it in LED (Didn't need to care about mode I already handle about it)

3) front-end

To update data use post request to <https://led-api.herokuapp.com/control> endpoint with data in JSON format as following

JSON representation

```
{
  "mode": "auto",
  "brightness": 10,
  "color": "#fcba03"
}
```

each Fields will describe below

mode accepted only string "auto", "off", "normal"
describe mode of LED

brightness accepted int between 0-100
describe brightness of LED in normal mode
(if in off or auto mode it will not affect the led.
But you need to put it in json in correct format even in off or auto mode)

color accepted string start with # follow by 6 character between 0-f
describe hex Color of LED in normal mode
(if in off or auto mode it will not affect the led.
But you need to put it in json in correct format even in off or auto mode)

if your json correct it will response status 201 and JSON that update to server
else will response status 400 and plain-text about error

To get data of sensor (LUX) use get request to <https://led-api.herokuapp.com/show> endpoint

it will response status 200 and JSON format as following

JSON representation

```
{
  "mode": "normal",
  "brightness": 600,
  "color": "#fcba03"
}
```

each Fields will describe below

mode string describe present mode of LED

brightness int describe brightness value measure from sensor
between 0-9999 in LUX

color string start with # follow by 6 character between 0-f (hex Color)
describe Color measure by sensor