AKADEMIA TARNOWSKA
Wydział Politechniczny

SMART CITY HUB API Documentation

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ShortSummary of API calls

- All calls from the API require JWT token to work.
- JWT Token is generated on the server when users successfully login into the API using their credentials and is returned to them.
- Admin API calls work only if the user is admin. This information is in his token.
- User API calls work for all users, admins and normal users.
- By default user role = their home Address, but it's possible to create a user with a special role and access to more homes.
- Admin has access to all devices, can change their state, delete them, and add new users

Admin Endpoints

Create User

Endpoint: POST `http://localhost:4200/api/user/create`

Request Headers
x-access-token:

```
Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJ
leHAiOjE3MjA2NDQ4ODl9.fk-aMPlXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60
```

Request Body
Content-Type: `application/json`
json

```json
{
  "email": "user001@mail.com",
  "name": "user001",
  "role": "home01",
  "password": "password",
  "isAdmin": false
}
```

http://192.168.0.107:4200/api/user/create

Save

| POST | http://192.168.50.243:4200/api/user/create | Send |

Params   Authorization   Headers (10)   Body •   Pre-request Script   Tests   Settings

Cookies

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   JSON   ⌄

Beautify

```
1  {
2    "name": "user03",
3    "email": "user03@mail.pl",
4    "role" : "home01",
5    "password": "password"
6  }
```

Body   Cookies   Headers (9)   Test Results

Status: 200 OK   Time: 237 ms   Size: 437 B   Save Response ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1  {
2    "email": "user03@mail.pl",
3    "name": "user03",
4    "role": "home01",
5    "active": true,
6    "isAdmin": false,
7    "_id": "666bfdd072bc63ac2615e2fc",
8    "__v": 0
9  }
```

---

http://192.168.0.107:4200/api/user/auth

Save

| POST | http://192.168.0.107:4200/api/user/auth | Send |

Params   Authorization   Headers (9)   Body •   Pre-request Script   Tests   Settings

Cookies

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   JSON   ⌄

Beautify

```
1  {
2    "login": "user01@mail.pl",
3    "password": "password"
4  }
5
```

Body   Cookies   Headers (9)   Test Results

Status: 200 OK   Time: 193 ms   Size: 590 B   Save Response ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1  {
2    "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.
       eyJ1c2VySWQiOiI2NjZiNmZjNmNhMTFjMzRiMGY2MzU3MWYiLCJuYW1lIjoidXNlcjAxQG1haWwucGwiLCJyb2xlIjoidXNlciIsImlzQWRtaW4iOmZhbHNlLCJ
       hY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzE3NDU5LCJleHAiOjE3MjA5MDk0NTl9.GnhyYRXcXJPJAm3o2VOiOPp3sfFFe-SUHb09rDsJeEA"
3  }
```

Add Device

Endpoint: POST http://localhost:4200/api/device/update

Request Headers
x-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJ
leHAiOjE3MjA5NDY5OTR9.9ezXGHzjervUgyYUb8pSZNdLPRwFvAuiYAS-hJKX9_E

Query Params
x-access-token:
Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJ
leHAiOjE3MjA2NDQ4ODl9.fk-aMPlXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60

Request Body
Content-Type: application/json
json

```json
{
  "name": "Lamp_2",
  "location": "House_01",
  "id": 2,
  "description": "lampa",
  "type": "light"
}
```

Update Devices States (Admin) (all_locations)

Endpoint: POST http://localhost:4200/api/state/update

Request Headers
x-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzY3ODYyLCJ
leHAiOiE3MjA5NTk4NjJ9.n_T_XUFOASDChG6R9yWnQNK9wGH6js5DXezRMTo-BjE
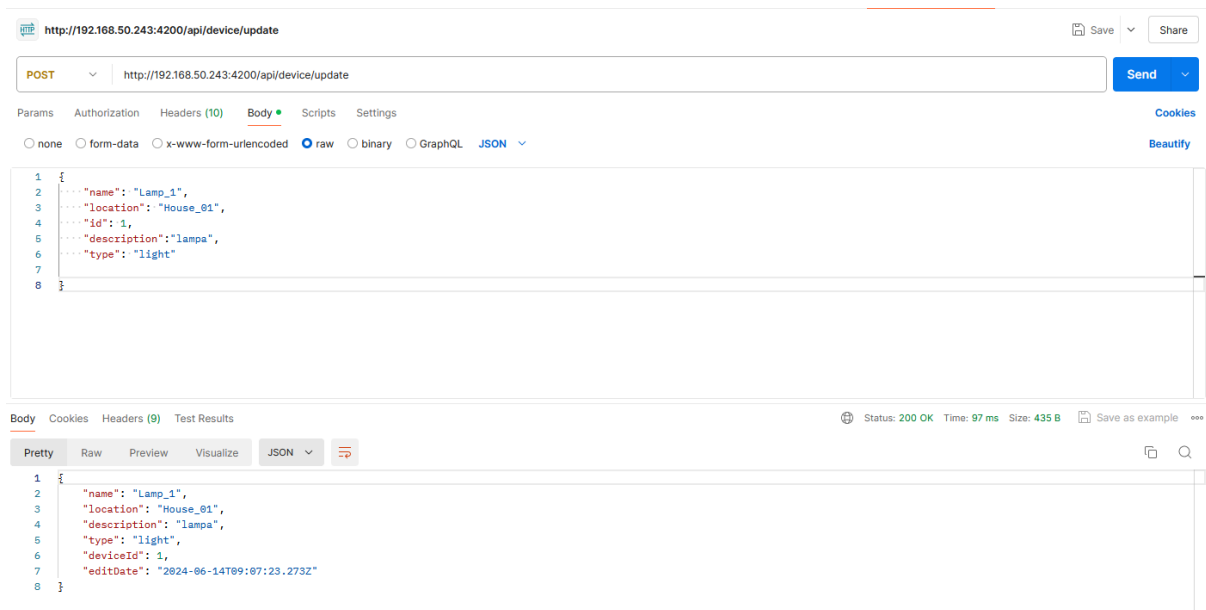
Query Params
x-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJ
leHAiOiE3MjA2NDQ4ODl9.fk-aMPlXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60

Request Body

Content-Type: `application/json`
json

```json
{
  "deviceStates": [
    {"deviceId": 0, "state": true},
    {"deviceId": 1, "state": true},
    {"deviceId": 2, "state": true},
    {"deviceId": 3, "state": true},
    {"deviceId": 4, "state": true},
    {"deviceId": 5, "state": true},
    {"deviceId": 6, "state": true}
  }
}
```

Delete Device

Endpoint: `DELETE http://localhost:4200/api/device/2`

Request Headers
X-access-token:
`Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJleHAiOjE3MjA5NDY5OTR9.9ezXGHzjervUgyYUb8pSZNdLPRwFvAuiYAS-hJKX9_E`

Request Body
Content-Type: `application/json`
json

```json
{
  "name": "Lamp_2",
  "location": "House_01",
  "id": 2,
  "description": "lampa",
  "type": "light"
}
```

Get All Devices States

Endpoint: GET `http://localhost:4200/api/state/user/latest`
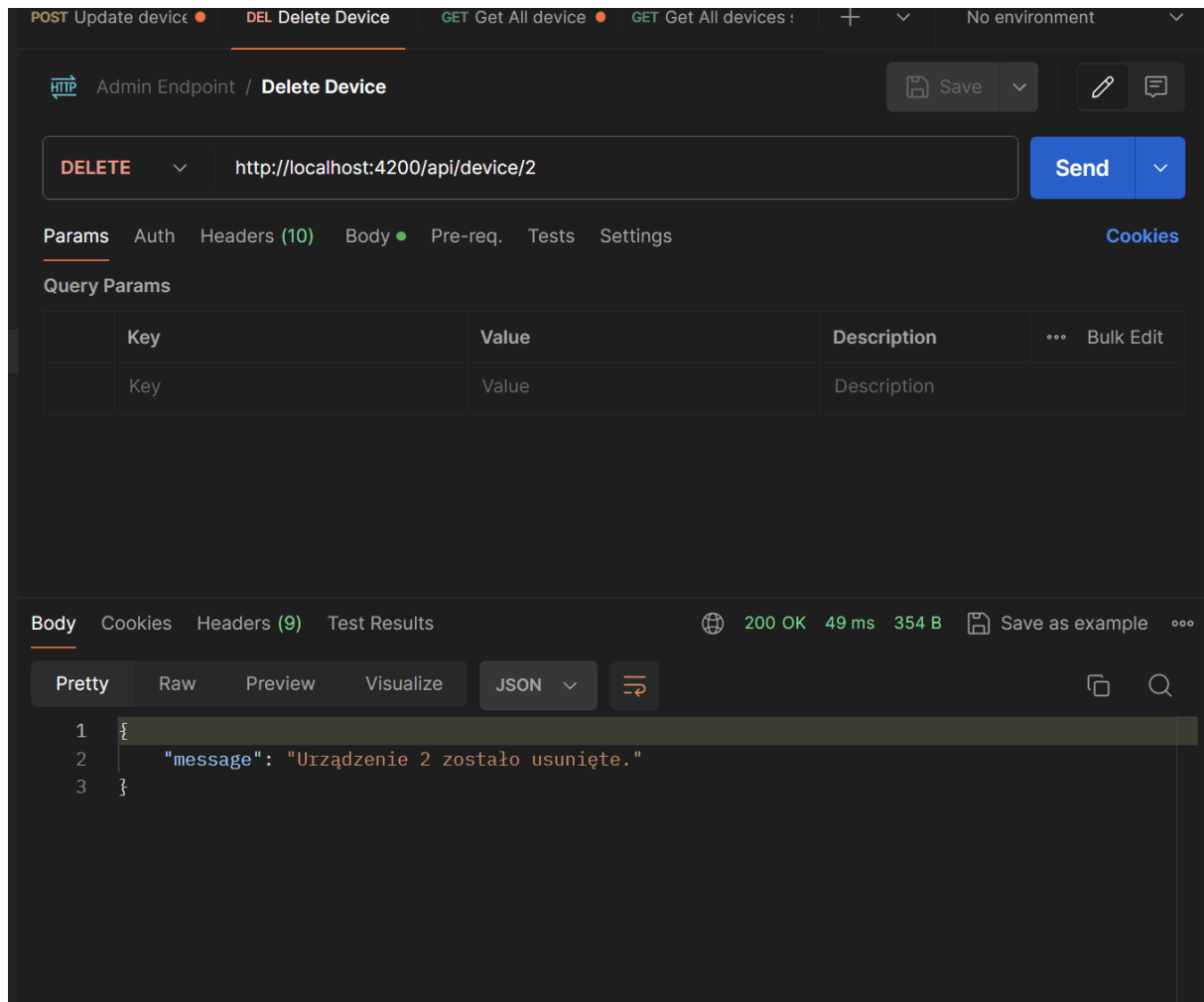
Request Headers
x-access-token:
Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJ
leHAiOjE3MjA5NDY5OTR9.9ezXGHzjervUgyYUb8pSZNdLPRwFvAuiYAS-hJKX9_E

Get All Devices

Endpoint: GET `http://192.168.50.243:4200/api/device/user/get`

Request Headers

x-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJ
leHAiOjE3MjA5NDY5OTR9.9ezXGHzjervUgyYUb8pSZNdLPRwFvAuiYAS-hJKX9_E

IoT Endpoints (Admin)

Get All Devices States

Endpoint: GET `http://localhost:4200/api/state/iot/all`

Request Headers
X-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDY
wMjJhYzViYzNhYzYiLCJuYW1lIjoiYWRtaW5AYWRtaW4ucGwiLCJyb2xlIjoiYWRtaW4
iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJ
leHAiOjE3MjA2NDQ4ODl9.fk-aMPlXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60

Sensors

Get All Sensors

Endpoint: `GET http://localhost:4200/api/sensor/all`

Request Headers
X-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWUzNjQ0Njg
5NTViZWQ1MjY3YTkiLCJuYW1lIjoidXNlcjFAdXNlcjEucGwiLCJyb2xlIjoiSG91c2V
fMDEiLCJpc0FkbWluIjpmYWxzZSwiYWNjZXNzIjoiYXV0aCIsImlhdCI6MTcxNTc5MzY
xNSwiZXhwIjoxNzE3MDAzMjE1fQ.U8xy3JBTOf32D-AGBQN5IuVjp3kzsK_hgGMgGHz0
-fs

Get Latest Sensors

Endpoint: `GET http://localhost:4200/api/sensor/all/latest`

Request Headers
X-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWUzNjQ0Njg
5NTViZWQ1MjY3YTkiLCJuYW1lIjoidXNlcjFAdXNlcjEucGwiLCJyb2xlIjoiSG91c2V
fMDEiLCJpc0FkbWluIjpmYWxzZSwiYWNjZXNzIjoiYXV0aCIsImlhdCI6MTcxNTc5MzY
xNSwiZXhwIjoxNzE3MDAzMjE1fQ.U8xy3JBTOf32D-AGBQN5IuVjp3kzsK_hgGMgGHz0
-fs

Params Authorization Headers (9) Body Scripts Settings

☑	Accept-Encoding	ⓘ	gzip, deflate, br
☑	Connection	ⓘ	keep-alive
☑	x-access-token		Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWU...
☐			

Body Cookies Headers (7) Test Results

Pretty Raw Preview Visualize JSON ∨

```json
1  [
2      [
3          {
4              "temperature": 25,
5              "pressure": 1013,
6              "humidity": 44,
7              "readingDate": "2024-05-15T11:05:20.766Z",
8              "deviceId": 1
9          }
10     ],
11     [
12         {
13             "temperature": 21.4,
14             "pressure": 1113.5,
15             "humidity": 31.4,
16             "readingDate": "2024-05-15T11:08:51.455Z",
17             "deviceId": 0
18         }
19     ],
20     [
21         {
22             "temperature": 23.4,
23             "pressure": 1013.5,
24             "humidity": 41.4,
```

Postbot ▶ Run

GET   http://localhost:4200/api/sensor/all/latest

arams   Authorization   **Headers (9)**   Body   Scripts   Settings

☑	Accept-Encoding	ⓘ	gzip, deflate, br
☑	Connection	ⓘ	keep-alive
☑	x-access-token		Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWU...
☐			

dy   Cookies   Headers (7)   Test Results

Pretty   Raw   Preview   Visualize   JSON ⌄

```json
[
    {
        "temperature": 25,
        "pressure": 1013,
        "humidity": 44,
        "readingDate": "2024-05-14T14:08:08.740Z",
        "deviceId": 3
    },
    {
        "temperature": 23.5,
        "pressure": 995.9,
        "humidity": 34.1,
        "deviceId": 8,
        "readingDate": "2024-03-19T11:45:25.914Z"
    },
    {
        "temperature": 22.6,
        "pressure": 992.8,
        "humidity": 26.5,
        "deviceId": 5,
        "readingDate": "2024-03-18T15:29:58.185Z"
    },
    {
        "temperature": 23,
        "pressure": 992.7,
        "humidity": 29,
```

User Endpoints

Get User Devices

Endpoint: GET `http://192.168.50.243:4200/api/device/user/get`

Request Headers
X-access-token:

Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZiNmZjNmNhMTF
jMzRiMGY2MzU3MWYiLCJuYW1lIjoidXNlcjAxQG1haWwucGwiLCJyb2xlIjoidXNlciI
sImlzQWRtaW4iOmZhbHNlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU1MzMxLCJ
leHAiOjE3MjA5NDczMzF9.d3ZDNFShffgO9EgJ-xYLpp45tmJ5wl5sIYhH2dFRBQY

Get User Devices States

Endpoint: GET `http://localhost:4200/api/state/user/latest`

Request Headers
X-access-token:
Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWUzNjQ0Njg
5NTViZWQ1MjY3YTkiLCJuYW1lIjoidXNlcjFAdXNlciEucGwiLCJyb2xlIjoiSG91c2V
fMDEiLCJpc0FkbWluIjpmYWxzZSwiYWNjZXNzIjoiYXV0aCIsImlhdCI6MTcxNTc5MzY
xNSwiZXhwIjoxNzE3MDAzMjE1fQ.U8xy3JBTOf32D-AGBQN5IuVjp3kzsK_hgGMgGHz0
-fs

Authenticate User (Get Token)

Endpoint: `POST http://localhost:4200/api/user/auth`

Request Body
Content-Type: `application/json`
json

```
{
    "login": "sampleUser01@mail.com",
```

```
  "password": "password"
}
```

http://192.168.0.107:4200/api/user/auth

Save

POST   http://192.168.0.107:4200/api/user/auth   Send

Params   Authorization   Headers (9)   Body   Pre-request Script   Tests   Settings   Cookies

Headers   8 hidden

	Key	Value	Bulk Edit
☑	Content-Type	application/json	
	Key	Value	

Response

http://192.168.0.107:4200/api/user/auth

Save

POST   http://192.168.0.107:4200/api/user/auth   Send

Params   Authorization   Headers (9)   Body   Pre-request Script   Tests   Settings   Cookies

none   form-data   x-www-form-urlencoded   raw   binary   JSON   Beautify

```
1  {
2    "login": "user01@mail.pl",
3    "password": "password"
4  }
5
```

Body   Cookies   Headers (9)   Test Results   Status: 200 OK   Time: 193 ms   Size: 590 B   Save Response

Pretty   Raw   Preview   Visualize   JSON

```
1  {
2    "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.
       eyJ1c2VySWQiOiI2NjZiNmZjNmNhMTFjMzRiMGY2MzU3MWYiLCJuYW1lIjoidXNlcjAxQG1haWwucGwiLCJyb2xlIjoidXNlciIsImlzQWRtaW4iOmZhbHNlLCJ
       hY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzE3NDU5LCJleHAiOjE3MjA5MDk0NTl9.GnhyYRXcXJPJAm3o2VOiOPp3sfFFe-SUHb09rDsJeEA"
3  }
```
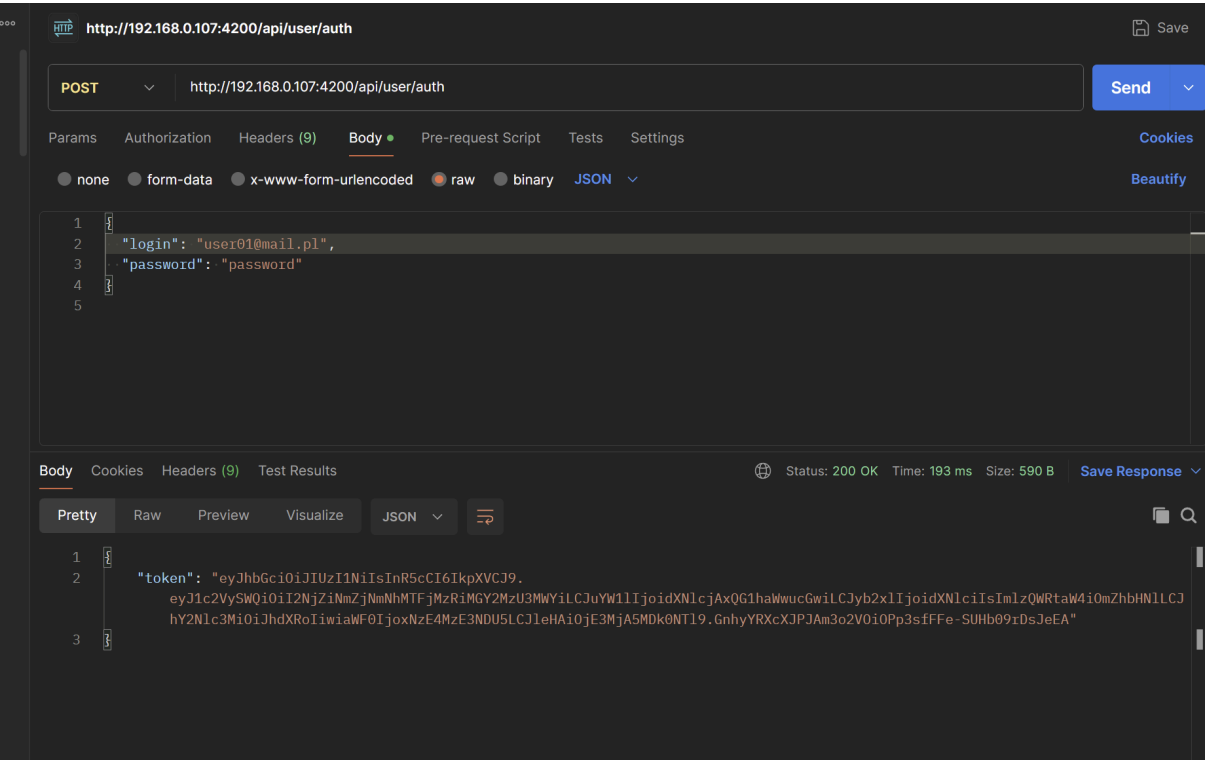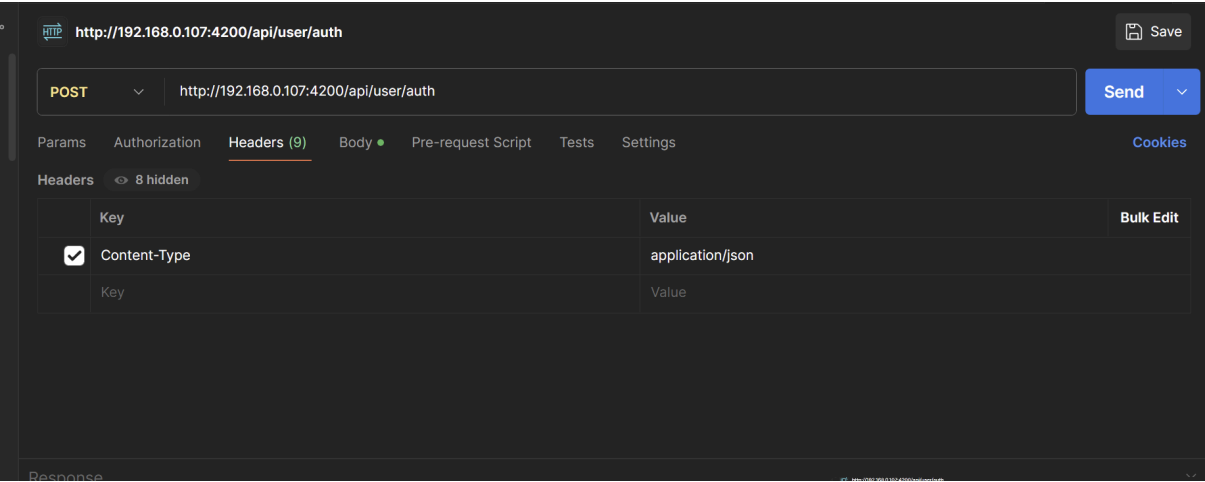
Update User Devices States

Endpoint: POST `http://192.168.50.243:4200/api/state/user/update`

Request Headers
X-access-token:
Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWUzNjQ0Njg5NTViZWQ1MjY3YTkiLCJuYW1lIjoidXNlcjFAdXNlciEucGwiLCJyb2xlIjoiSG91c2VfMDEiLCJpc0FkbWluIjpmYWxzZSwiYWNjZXNzIjoiYXV0aCIsImlhdCI6MTcxNTg4MzI0MywiZXhwIjoxNzE3MDkyODQzfQ.F2BC6VlqFsLStetF0kLMBzPpzImBjgdrU8h-RwJBZRM

Request Body
Content-Type: `application/json`

```json
{
  "deviceStates": [
    {"deviceId": 0, "state": true},
    {"deviceId": 1, "state": false},
    {"deviceId": 4, "state": false}
  ]
}
```

Logout User

Endpoint: DELETE http://localhost:4200/api/user/logout/{userID}

Request Headers

X-access-token:
Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZlMjhjNGE5NTk
zM2IxZTlmN2Q1ZmMiLCJuYW1lIjoiYWRtaW4iLCJyb2xlIjoiYWRtaW4iLCJpc0FkbWl
uIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4NjQxMjE1LCJleHAiOjE3MjE
yMzMyMTV9.q8b-nuYt3FDOyRtD0JIgAG8BlvNii-bim1qc-pB6yKs

HTTP http://192.168.0.107:4200/api/user/logout/666b6fc6ca11c34b0f63571f

💾 Save

DELETE ⌄ | http://192.168.0.107:4200/api/user/logout/666b6fc6ca11c34b0f63571f | **Send** ⌄

Params   Authorization   **Headers (8)**   Body   Pre-request Script   Tests   Settings   **Cookies**

Headers   👁 6 hidden

	Key	Value	Bulk Edit
☑	Content-Type	application/json	
☑	x-access-token	Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZiNmZj...	
	Key	Value	

Body   Cookies   Headers (9)   Test Results   🌐 Status: 200 OK   Time: 45 ms   Size: 345 B   Save Response ⌄

Pretty   Raw   Preview   Visualize   JSON ⌄   ⇥   ▭ 🔍

```
1  {
2      "acknowledged": true,
3      "deletedCount": 1
4  }
```