



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.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJleHAiOiE3MjA2NDQ4ODl9.fk-aMPLXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60`

Request Body

Content-Type: **application/json**

json

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

REST client interface showing a POST request to `http://192.168.0.107:4200/api/user/create`. The request headers are visible, including `Content-Type: application/json` and `x-access-token: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJleHAiOiE3MjA2NDQ4ODl9.fk-aMPLXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60`. The request body is shown in raw JSON format.

| Key | Value | Bulk Edit |
|--|--|-----------|
| <input checked="" type="checkbox"/> Content-Type | application/json | |
| <input checked="" type="checkbox"/> x-access-token | Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJleHAiOiE3MjA2NDQ4ODl9.fk-aMPLXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60 | |
| Key | Value | |

Status: 200 OK Time: 340 ms Size: 443 B Save Response

HTTP client interface showing a POST request to `http://192.168.0.107:4200/api/user/create`. The request body is a JSON object:

```
{  "name": "user03",  "email": "user03@mail.pl",  "role": "home01",  "password": "password"}
```

The response status is 200 OK, Time: 237 ms, Size: 437 B. The response body is a JSON object:

```
{  "email": "user03@mail.pl",  "name": "user03",  "role": "home01",  "active": true,  "isAdmin": false,  "_id": "666bfdd072bc63ac2615e2fc",  "__v": 0}
```

HTTP client interface showing a POST request to `http://192.168.0.107:4200/api/user/auth`. The request body is a JSON object:

```
{  "login": "user01@mail.pl",  "password": "password"}
```

The response status is 200 OK, Time: 193 ms, Size: 590 B. The response body is a JSON object:

```
{  "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZiNmZjNmNhMTFjMzRiMGY2MzU3MmwyIiwiaWF0IjoidXNlcjAxQG1hZWwucGwilCjyb2x1IjoidXNlcisiImIzQWRtaW4iOmZhbHN1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzE3NDU5LCJleHAiOjE3MjA5MDk0NTI5LmhyYXRxcXJPJam3o2V0i0Pp3sffFe-SUhb09r0sJeEA"}
```


Add Device

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

Request Headers

x-access-token:

Bearer

`eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJleHAiOiE3MjA5NDY5OTR9.9ezXGHZjervUgyYUb8pSZNdLPRwFvAuiYAS-hJKX9_E`

Query Params

x-access-token:

Bearer

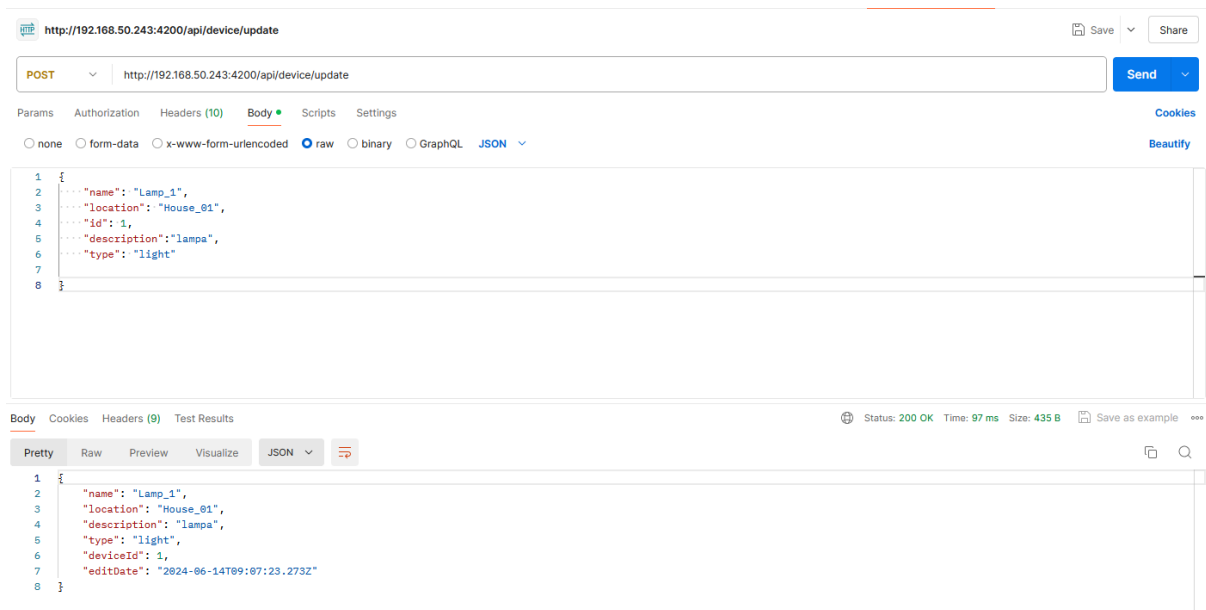
`eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJleHAiOiE3MjA2NDQ4ODl9.fk-aMPLXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60`

Request Body

Content-Type: `application/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.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDZyODYyLCJleHAiOiJlE3MjA5NTk4NjJ9.n_T_XUFOASDChG6R9yWnQNK9wGH6js5DXezRMTTo-BjE

Query Params

x-access-token:

Bearer

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnVlLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJleHAiOiJlE3MjA2NDQ4ODl9.fk-aMPlXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60

Request Body

Content-Type: `application/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:

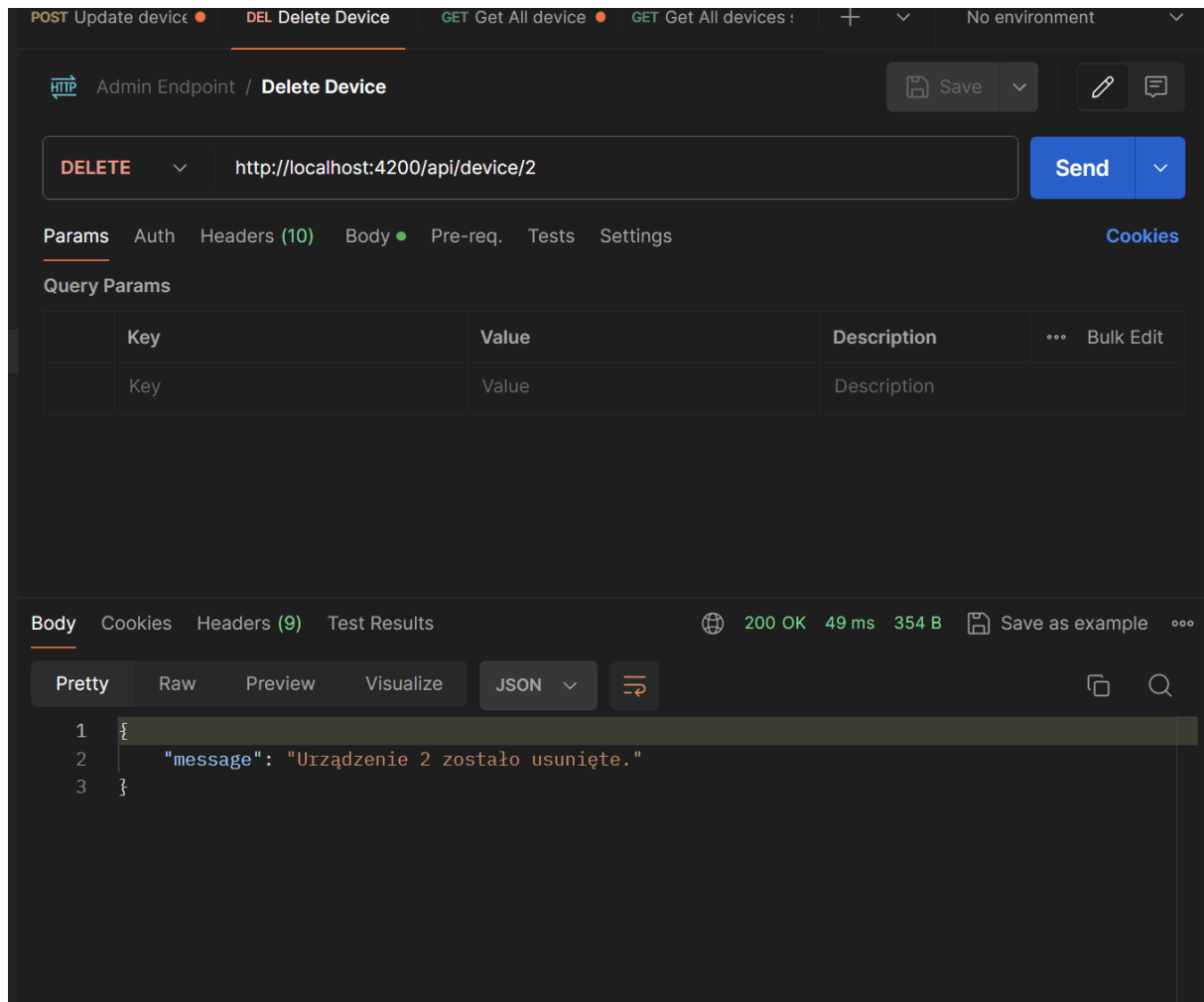
Bearer

`eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJleHAiOiE3MjA5NDY5OTR9.9ezXGHZjervUgyYUb8pSZNdLPRwFvAuiYAS-hJKX9_E`

Request Body

Content-Type: `application/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.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiaWVWRTaW5AYWRtaW4ucGwiLCJyb2x1IjoiaWVWRTaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJleHAiOiJlE3MjA5NDY5OTR9.9ezXGHZjervUgyYU8pSZNdLPRwFvAuiYAS-hJKX9_E

Get All Devices

Endpoint: GET <http://192.168.50.243:4200/api/device/user/get>

Request Headers

x-access-token:

Bearer

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU0OTk0LCJleHAiOjE3MjA5NDY5OTR9.9ezXGHZjervUgyYUb8pSZNdLPRwFvAuiYAS-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.eyJ1c2VySWQiOiI2NjY3NjgxMTZhMDYwMjJhYzViYzNhYzYiLCJuYW1lIjoiiYWRtaW5AYWRtaW4ucGwiLCJyb2x1IjoiiYWRtaW4iLCJpc0FkbWluIjp0cnV1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MDUyODg5LCJleHAiOiE3MjA2NDQ4ODl9.fk-aMPlXWVbsSfCPwybXg6IqbgDL6dyFs8Y0Icebe60`

Sensors

Get All Sensors

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

Request Headers

X-access-token:

Bearer

`eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWUzNjQ0Njg5NTViZWQ1MjY3YTkiLCJuYW1lIjoidXNlcjFAdXNlcjEucGwiLCJyb2x1IjoibG91c2VfMDEiLCJpc0FkbWluIjpmYWxzZSwiYWNjZXRzIjoibG91c2V0aCI6Im1hdCI6MTcxNTc5MzYxNSwiZXhwIjoxNzE3MDAzMjE1fQ.U8xy3JBT0f32D-AGBQN5IuVjp3kzsK_hgGMgGHZ0-fs`

Get Latest Sensors

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

Request Headers

X-access-token:

Bearer

`eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWUzNjQ0Njg5NTViZWQ1MjY3YTkiLCJuYW1lIjoidXNlcjFAdXNlcjEucGwiLCJyb2x1IjoibG91c2VfMDEiLCJpc0FkbWluIjpmYWxzZSwiYWNjZXRzIjoibG91c2V0aCI6Im1hdCI6MTcxNTc5MzYxNSwiZXhwIjoxNzE3MDAzMjE1fQ.U8xy3JBT0f32D-AGBQN5IuVjp3kzsK_hgGMgGHZ0-fs`

GET

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

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

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

Params

Authorization

Headers (9)

Body

Scripts

Settings

☒ Accept-Encoding

① gzip, deflate, br

☒ Connection

① keep-alive

☒ x-access-token

Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWU...

☐

dy Cookies Headers (7) Test Results

Pretty

Raw

Preview

Visualize

JSON

1

[

2

{

3

"temperature": 25,

4

"pressure": 1013,

5

"humidity": 44,

6

"readingDate": "2024-05-14T14:08:08.740Z",

7

"deviceId": 3

8

},

9

{

10

"temperature": 23.5,

11

"pressure": 995.9,

12

"humidity": 34.1,

13

"deviceId": 8,

14

"readingDate": "2024-03-19T11:45:25.914Z"

15

},

16

{

17

"temperature": 22.6,

18

"pressure": 992.8,

19

"humidity": 26.5,

20

"deviceId": 5,

21

"readingDate": "2024-03-18T15:29:58.185Z"

22

},

23

{

24

"temperature": 23,

25

"pressure": 992.7,

26

"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.eyJ1c2VySWQiOiI2NjZiNmZjNmNhMTFjMzRiMGY2MzU3MWYiLCJuYW11IjoidXNlcjAxQG1haWwucGwiLCJyb2x1IjoidXNlciIsIm1zQWRtaW4iOmZhbnHN1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU1MzIxLCJleHAiOiJlE3MjA5NDczMzF9.d3ZDNFShffg09EgJ-xYLpp45tmJ5w15sIYhH2dFRBQY`

UserEndpoints / Get user devices

SaveShare

GEThttp://192.168.50.243:4200/api/device/user/getSend

ParamsAuthorizationHeaders (8)BodyScriptsSettingsCookies

Headers7 hidden

| Key | Value | Description |
|--|---|-------------|
| <input checked="" type="checkbox"/> x-access-token | Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZiNmZjNmNhMTFjMzRiMGY2MzU3MWYiLCJuYW11IjoidXNlcjAxQG1haWwucGwiLCJyb2x1IjoidXNlciIsIm1zQWRtaW4iOmZhbnHN1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzU1MzIxLCJleHAiOiJlE3MjA5NDczMzF9.d3ZDNFShffg09EgJ-xYLpp45tmJ5w15sIYhH2dFRBQY | |
| Key | Value | Description |

BodyCookiesHeaders (9)Test ResultsStatus: 200 OKTime: 57 msSize: 566 BSave as example

PrettyRawPreviewVisualizeJSON

```
1 [
2   {
3     "location": "House_01",
4     "editDate": "2024-06-14T09:07:23.273Z",
5     "name": "Lamp_1",
6     "deviceId": 1,
7     "description": "lampa",
8     "type": "light"
9   },
10  {
11    "location": "House_01",
12    "editDate": "2024-06-14T09:10:48.817Z",
13    "name": "Lamp_2",
14    "deviceId": 2,
15    "description": "lampa",
```

Get User Devices States

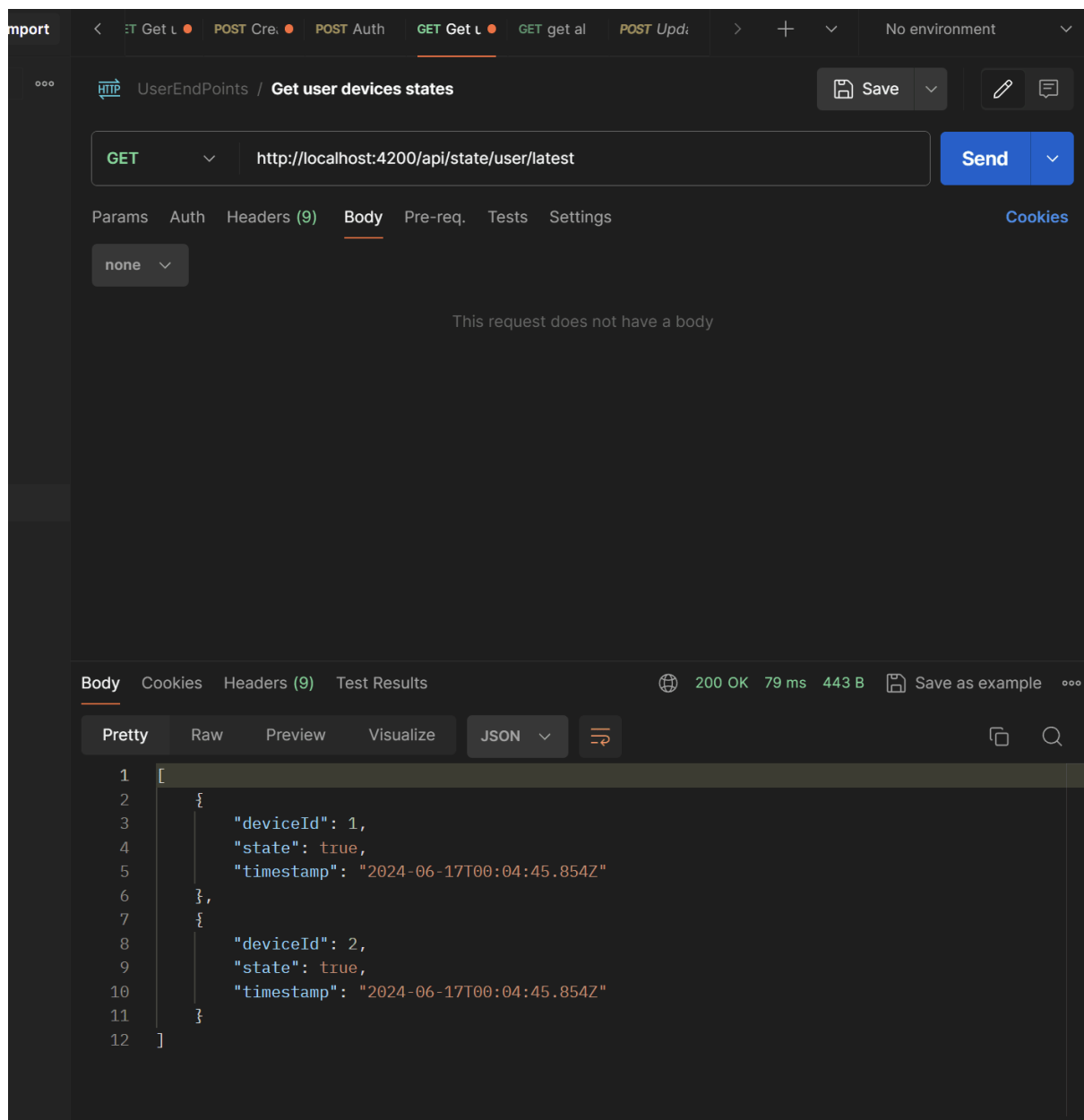
Endpoint: GET `http://localhost:4200/api/state/user/latest`

Request Headers

X-access-token:

Bearer

`eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjQ0ZWUzNjQ0Njg5NTViZWQ1MjY3YTkiLCJuYW11IjoidXNlcjFAdXNlcjEucGwiLCJyb2x1IjoiSG91c2VfMDEiLCJpc0FkbWluIjpmYWxzZSwiYWNjZXNzIjoiYXV0aCIIsIm1hdCI6MTcxNTc5MzYxNSwiZXhwIjoxNzE4MzU1MzIxLCJleHAiOiJlE3MjA5NDczMzF9.d3ZDNFShffg09EgJ-xYLpp45tmJ5w15sIYhH2dFRBQY`



Authenticate User (Get Token)

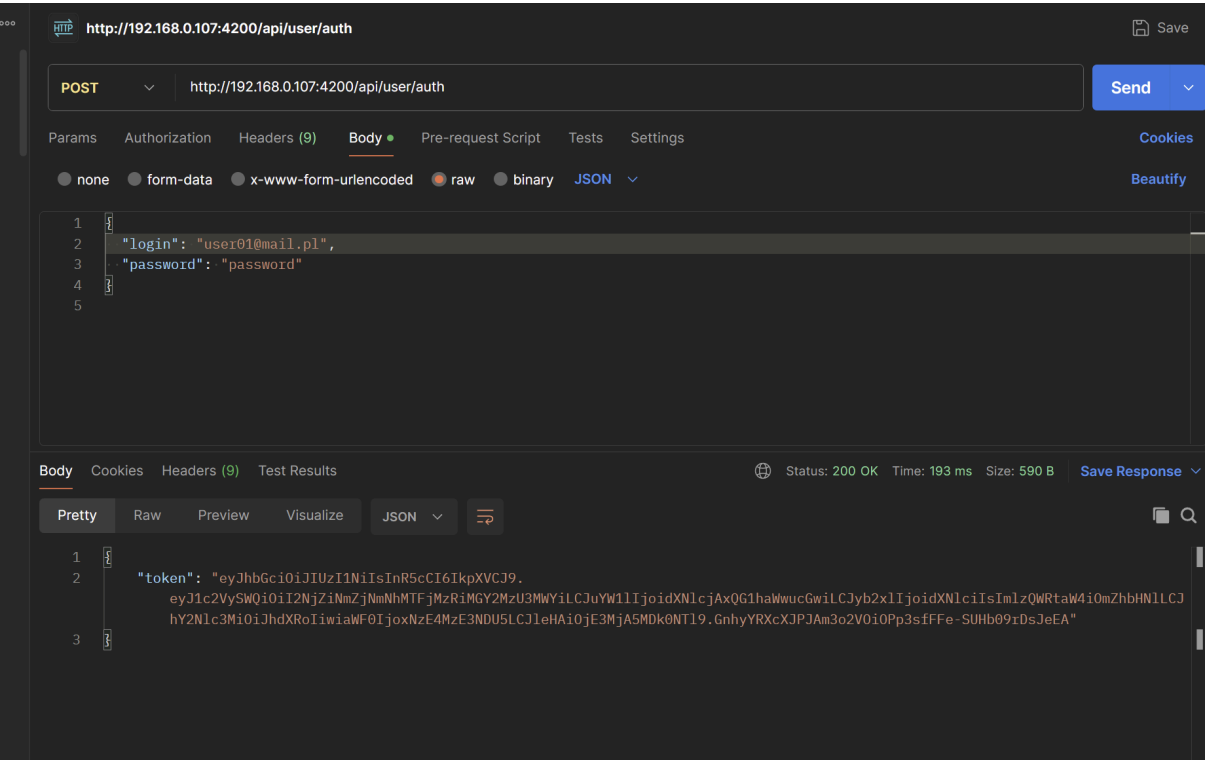
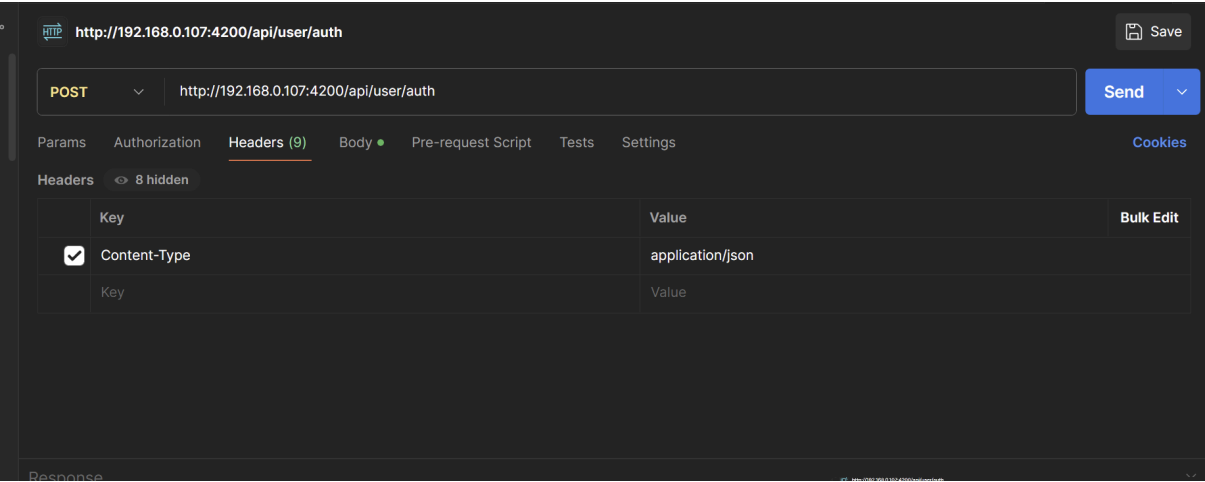
Endpoint: **POST** `http://localhost:4200/api/user/auth`

Request Body

Content-Type: `application/json`
json

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

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



The screenshot shows the JWT.io website interface. At the top, there's a navigation bar with links for Debugger, Libraries, Introduction, and Ask. The main content area is split into two panels: 'Encoded' and 'Decoded'. The 'Encoded' panel has a text input field containing a long JWT token. The 'Decoded' panel shows the decoded payload in a structured format.

Encoded PASTE A TOKEN HERE

```
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZiNmZjNmNmMTFjMzRiMGY2MzU3MWYiLCJuYXV1IjoidXNlcjAxQG1haWwucGwiLCJyb2x1IjoidXNlcjIsIm1zQWRtaW4iOmZhbHN1LCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzE3NDU5LCJleHAiOiE3MjA5MDk0NT19.GnhyYRXcXJPJAm3o2V0i0Pp3sFFe-SUHb09rDsJeEA
```

Decoded EDIT THE PAYLOAD AND SECRET

HEADER: ALGORITHM & TOKEN TYPE

```
{  "alg": "HS256",  "typ": "JWT"}
```

PAYLOAD: DATA

```
{  "userId": "666b6fc6ca11c34b0f63571f",  "name": "user01@mail.pl",  "role": "user",  "isAdmin": false,  "access": "auth",  "iat": 1718317459,  "exp": 1720909459}
```

VERIFY SIGNATURE

Update User Devices States

Endpoint: POST <http://192.168.50.243:4200/api/state/user/update>

Request Headers

X-access-token:

Bearer

```
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZiNmZjNmNmMTFjMzRiMGY2MzU3MWYiLCJuYXV1IjoidXNlcjFAdXNlcjEucGwiLCJyb2x1IjoidXNlcjEucGwiLCJyb2x1IjoidXNlcjEucGwiLCJhY2Nlc3MiOiJhdXRoIiwiaWF0IjoxNzE4MzE3NDU5LCJleHAiOiE3MjA5MDk0NT19.GnhyYRXcXJPJAm3o2V0i0Pp3sFFe-SUHb09rDsJeEA
```

Request Body

Content-Type: [application/json](#)

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


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 |
|-------------------------------------|----------------|---|-----------|
| <input checked="" type="checkbox"/> | Content-Type | application/json | |
| <input checked="" type="checkbox"/> | x-access-token | Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOiI2NjZlNmZjZj... | |
| | 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

3

4

{

"acknowledged": true,

"deletedCount": 1

}