

Weather Station Service API

POST /users

Register a new user to the system.

Request

username	string (required)	Publicly visible username
name	string (required)	First and last name of the user
dateOfBirth	string (required)	User's date of birth - RFC 3339 format
address	string (required)	User's street address and house number
city	string (required)	User's city
country	string (required)	User's country
email	string (required)	User's email

```
{
  "username": "danielkonecny",
  "name": "Daniel Konecny",
  "dateOfBirth": "1997-09-28",
  "address": "Sidliste 361",
  "city": "Moravsky Krumlov",
  "country": "CZ",
  "email": "dkonecny97@gmail.com"
}
```

Response

201 - User created successfully.

id	int	The id assigned to the user.
----	-----	------------------------------

```
{
  "id": 123456
}
```

400 - Provided information are incorrect.

incorrectFields	array of strings	Array of incorrect fields.
-----------------	------------------	----------------------------

```
{
  "incorrectFields": ["dateOfBirth", "email"]
}
```

PUT /users/123456

Modify user.

Request

name	string (optional)	First and last name of the user
dateOfBirth	string (optional)	User's date of birth - RFC 3339 format
address	string (optional)	User's street address and house number
city	string (optional)	User's city
country	string (optional)	User's country
email	string (optional)	User's email

```
{  
  "address": "Sidliste 361",  
  "city": "Moravsky Krumlov",  
  "country": "CZ",  
}
```

Response

200 - User modified successfully.

No body.

400 - Provided information are incorrect – no fields will be modified.

incorrectField	array of strings	Array of incorrect fields.
----------------	------------------	----------------------------

```
{  
  "incorrectField": ["dateOfBirth", "email"]  
}
```

404 - User not found.

No body.

DELETE /users/123456

Delete user.

Request

No body.

Response

200 - User deleted successfully.

No body.

404 - User not found.

No body.

GET /users

Get all the users registered to the system.

Request

No body.

Response

200 – Array of all users.

id	int	Identification number of the user.
username	string	Publicly visible username
name	string	First and last name of the user
dateOfBirth	string	User's date of birth - RFC 3339 format
address	string	User's street address and house number
city	string	User's city
country	string	User's country
email	string	User's email

```
{
  [
    {
      "id": 123456
      "username": "danielkonecny",
      "name": "Daniel Konecny",
      "dateOfBirth": "1997-09-28",
      "address": "Sidliste 361",
      "city": "Moravsky Krumlov",
      "country": "CZ",
      "email": "dkonecny97@gmail.com"
    },
    {
      "id": 654321
      "username": "jakubkonecny",
      "name": "Jakub Konecny",
      "dateOfBirth": "1992-10-18",
      "address": "Sidliste 361",
      "city": "Moravsky Krumlov",
      "country": "CZ",
      "email": "konecny92@gmail.com"
    }
  ]
}
```

POST /users/123456

Register a new sensor to the system.

Request

deviceType	string (required)	What kind of device it is.
description	string (required)	Description of the sensor, e. g. location.
locationLatitude	string (required)	Format DD MM SS.SS – degree, minute, second
locationLongitude	string (required)	Format DDD MM SS.SS – degree, minute, second
sensorType	string (required)	Temperature, humidity, rainfall, wind, cloud coverage

```
{
  "deviceType": "Raspberry Pi",
  "description": "Sensor located in sun shaded measurement box on top of
a 12 story building",
  "locationLatitude": "44 38 12.32",
  "locationLongitude": "-134 12 27.11",
  "sensorType": "Temperature"
}
```

Response

201 - Sensor created successfully.

id	string	The id assigned to the sensor.
----	--------	--------------------------------

```
{
  "id": "2f4-23K-992-102"
}
```

400 - Provided information are incorrect.

incorrectFields	array of strings	Array of incorrect fields.
-----------------	------------------	----------------------------

```
{
  "incorrectFields": ["locationLatitude", "sensorType"]
}
```

PUT /users/123456/sensors

Edit a sensor in the system.

Request

code	string (required)	The id assigned to the sensor.
deviceType	string (optional)	What kind of device it is.
description	string (optional)	Description of the sensor, e. g. location.
locationLatitude	string (optional)	Format DD MM SS.SS – degree, minute, second
locationLongitude	string (optional)	Format DDD MM SS.SS – degree, minute, second
sensorType	string (optional)	Temperature, humidity, rainfall, wind, cloud coverage

```
{
  "code": "2f4-23K-992-102",
  "description": "Sensor located in sun shaded measurement box on top of
a 12 story building",
  "locationLatitude": "44 38 12.32",
  "locationLongitude": "-134 12 27.11",
}
```

Response

200 – Sensor edited successfully.

No body.

400 - Provided information are incorrect.

incorrectFields	array of strings	Array of incorrect fields.
-----------------	------------------	----------------------------

```
{
  "incorrectFields": ["locationLatitude"]
}
```

404 - Sensor not found.

No body.

DELETE /users/123456/sensors

Delete a sensor.

Request

code	string (required)	The id assigned to the sensor.
------	-------------------	--------------------------------

```
{  
  "code": "2f4-23k-992-102"  
}
```

Response

200 – Sensor deleted successfully.

No body.

404 - Sensor not found.

No body.

GET /users/123456

Get user's sensors.

Request

No body.

Response

200 – All user's sensors.

code	string	The id assigned to the sensor.
deviceType	string	What kind of device it is.
description	string	Description of the sensor, e. g. location.
locationLatitude	string	Format DD MM SS.SS – degree, minute, second
locationLongitude	string	Format DDD MM SS.SS – degree, minute, second
sensorType	string	Temperature, humidity, rainfall, wind, cloud coverage

```
{
[
{
"code": "2f4-23K-992-102",
"deviceType": "Raspberry Pi",
"description": "Sensor located in sun shaded measurement box on top of
a 12 story building",
"locationLatitude": "44 38 12.32",
"locationLongitude": "-134 12 27.11",
"sensorType": "Temperature"
},
{
"code": "2f4-23K-992-102",
"deviceType": "Raspberry Pi",
"description": "Sensor located in sun shaded measurement box on top of
a 12 story building",
"locationLatitude": "44 38 12.32",
"locationLongitude": "-134 12 27.11",
"sensorType": "Temperature"
}
]
}
```


POST /users/123456/sensor

Register a new sensor to the system.

Request

code	string (required)	The id assigned to the sensor.
measurement	string (required)	Obtained data from the sensor.
dateTime	string (required)	Datetime in UTC. Format: YYYY-MM-DDTHH:MM:SS.SS.

```
{
  "code": "2f4-23K-992-102"
  "measurement": "6 °C",
  "dateTime": "2020-01-01T22:05:42.42"
}
```

Response

201 – Measurement saved.

No body.

400 - Provided information are incorrect.

incorrectFields	array of strings	Array of incorrect fields.
-----------------	------------------	----------------------------

```
{
  "incorrectFields": ["dateTime"]
}
```

404 - Sensor not found.

No body.

GET /users/123456/sensors

Get sensor's data.

Request

code	string (required)	The id assigned to the sensor.
startTime	string (optional)	Datetime in UTC. Default: first measurement Format: YYYY-MM-DDTHH:MM:SS.SS.
endTime	string (optional)	Datetime in UTC. Default: last measurement. Format: YYYY-MM-DDTHH:MM:SS.SS.

```
{
  "code": "2f4-23K-992-102",
  "startTime": "2020-01-01T00:00:00.00"
}
```

Response

200 – Array of measurements from the sensor.

name	string	Name of the sensor's owner.
measurement	string	Obtained data from the sensor.
dateTime	string	Datetime in UTC. Format: YYYY-MM-DD HH:MM:SS.SS.

```
{
  "name": "Daniel Konecny",
  "measurements": [
    {
      "measurement": "6 °C",
      "dateTime": "2020-01-01T22:05:42.42"
    },
    {
      "measurement": "-3 °C",
      "dateTime": "2020-01-03T22:05:42.42"
    }
  ]
}
```

400 - Provided information are incorrect.

incorrectFields	array of strings	Array of incorrect fields.
-----------------	------------------	----------------------------

```
{
  "incorrectFields": ["startTime"]
}
```

404 - Sensor not found.

No body.