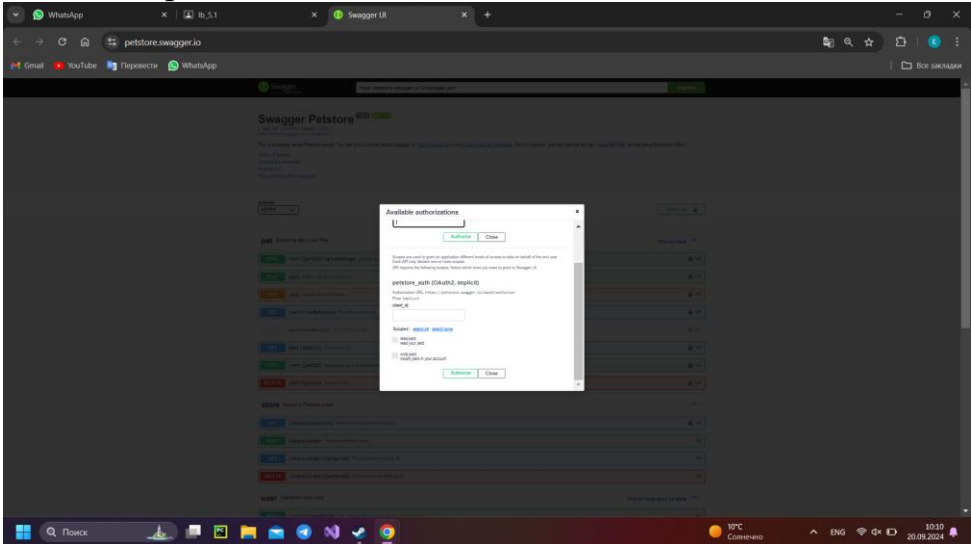
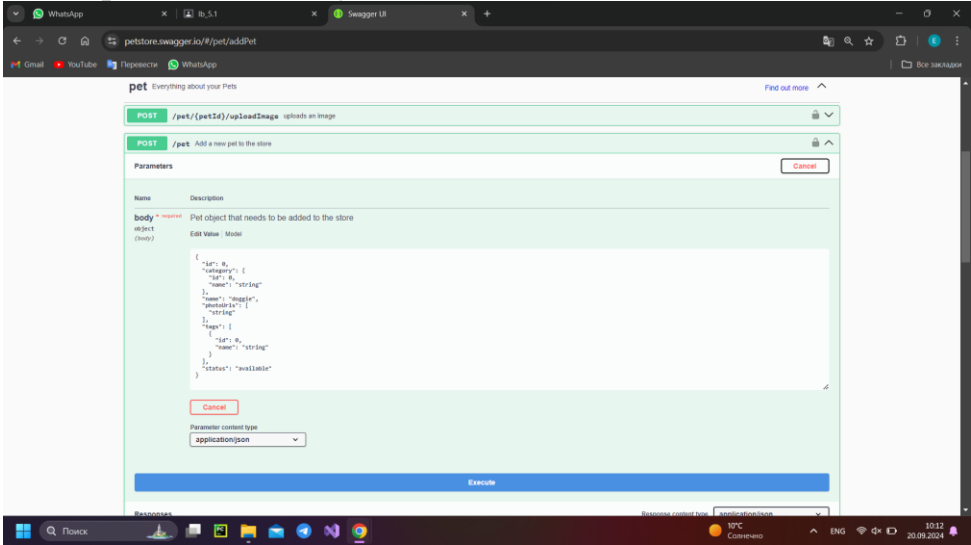
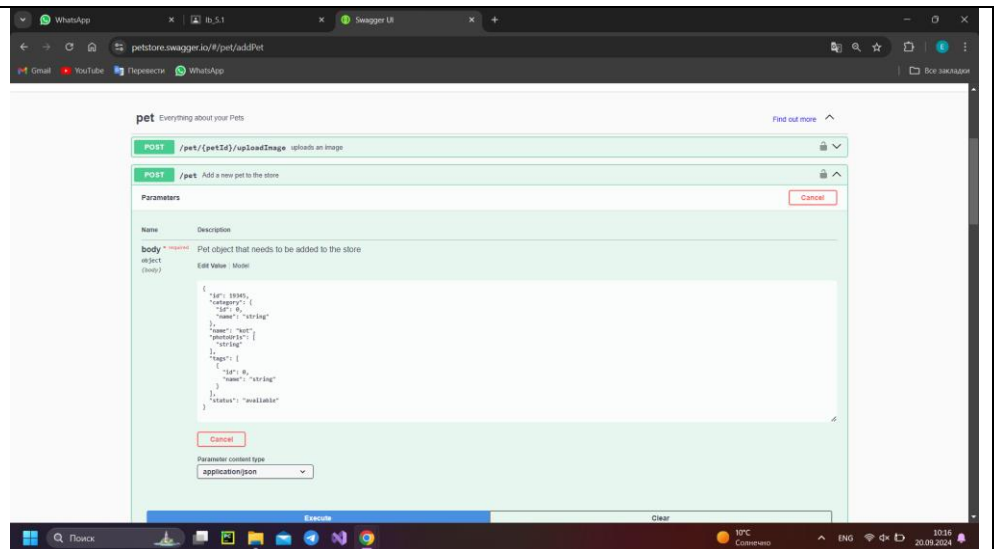
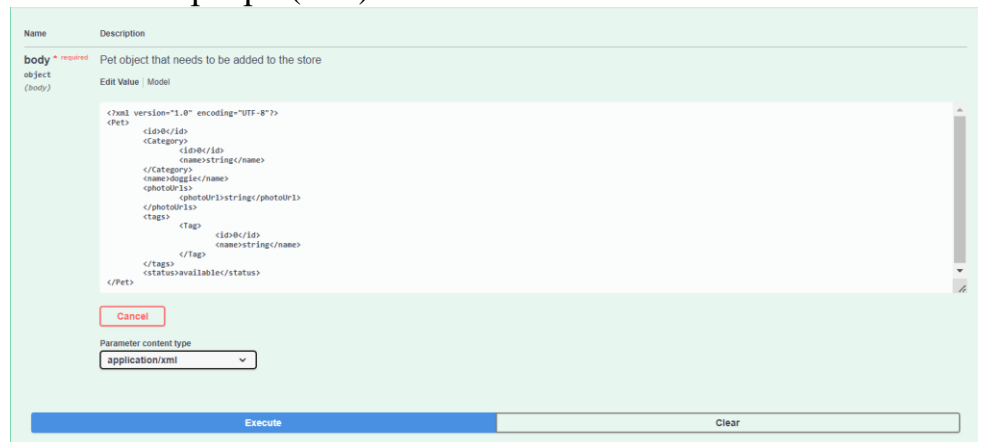


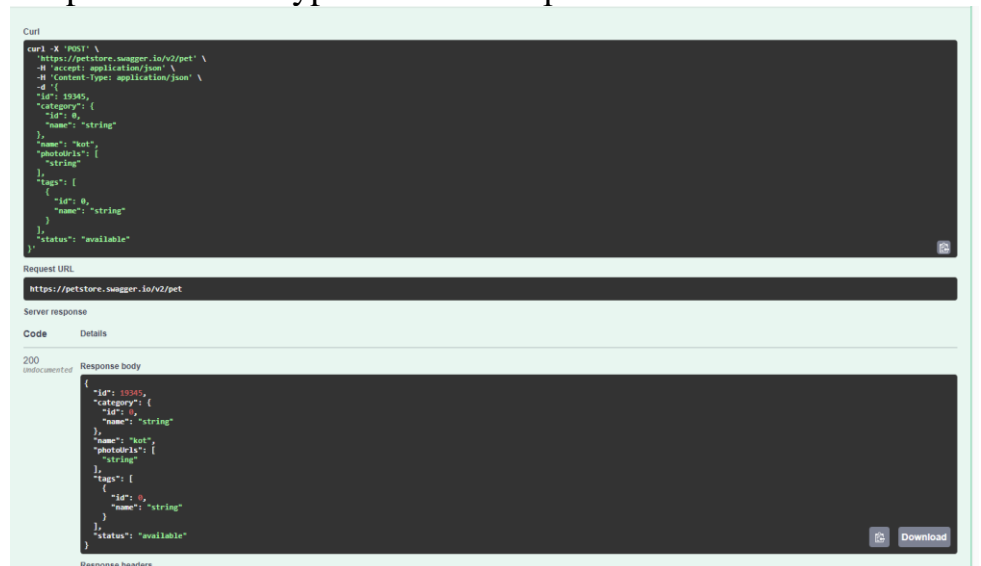
Тема Лабораторной работы	lb_5.1
Выполняющий	Бурова Екатерина ИС221
Помогающий	Глущенко Данил ИС221
Ход Работы	<p>1. Переходим по ссылке https://petstore.swagger.io/ Окно авторизации:</p>  <p>2. Открываем вкладку Pet</p>  <p>3. Нажимаем try it out для редактирования и добавляем нового питомца (kot с id 19345) и нажимаем execute</p>



Ответ от сервера (xml):



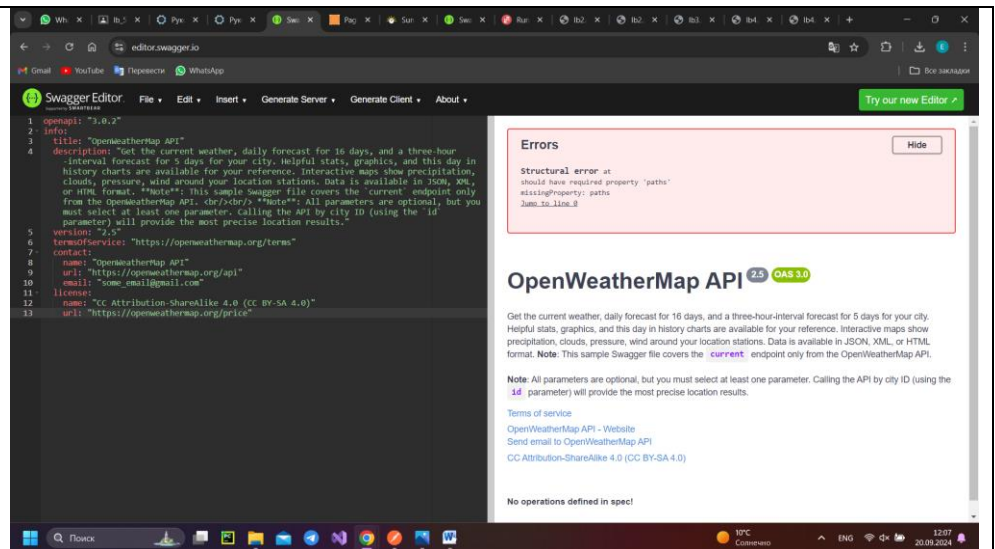
Response content type – Json и отправленный curl



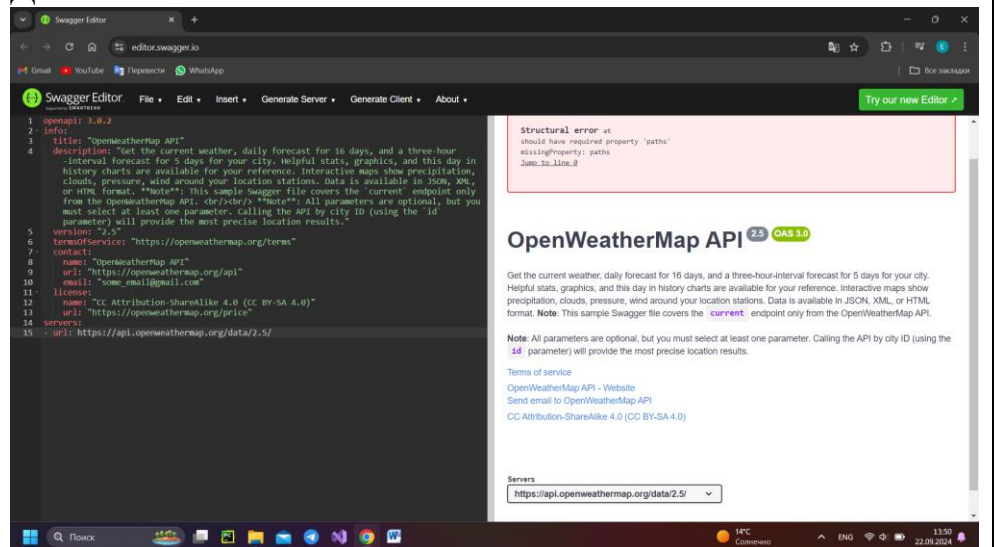
4. Редактируем спецификацию оренари

(<https://editor.swagger.io/>)

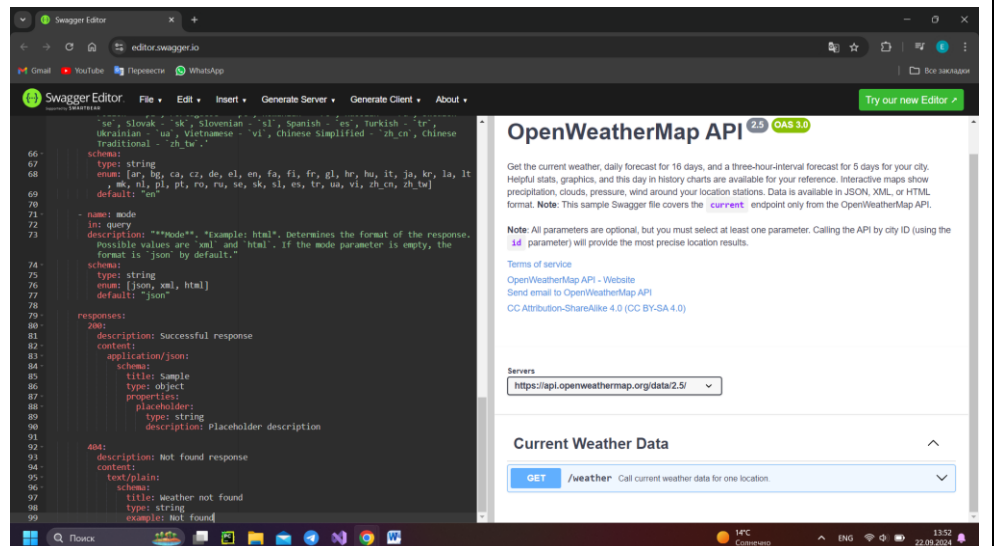
Замена оренари (3.0.2)



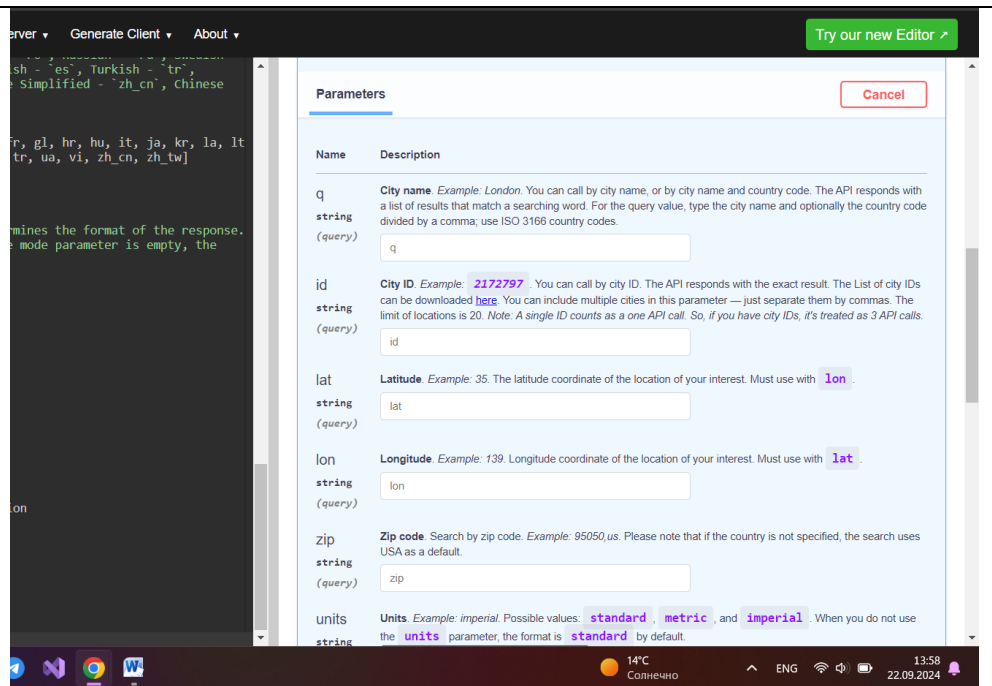
Добавление servers



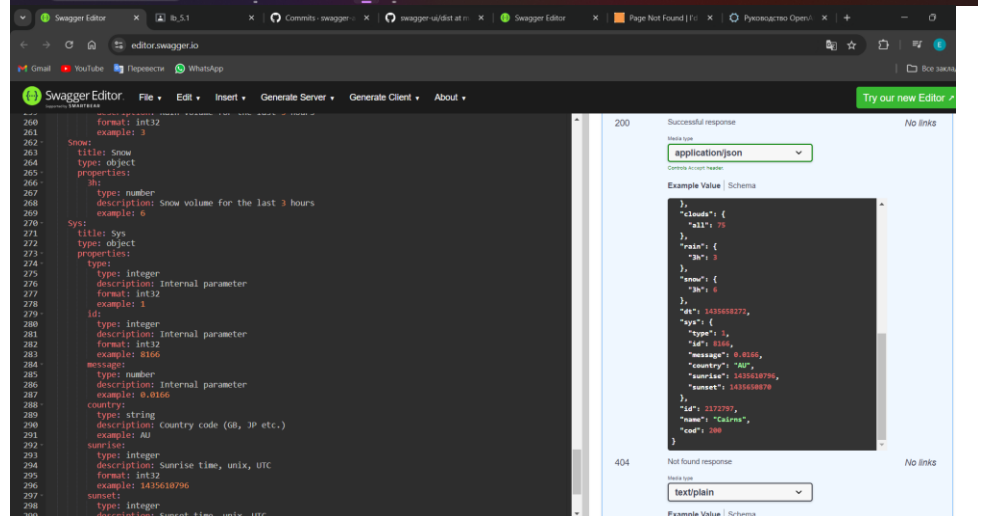
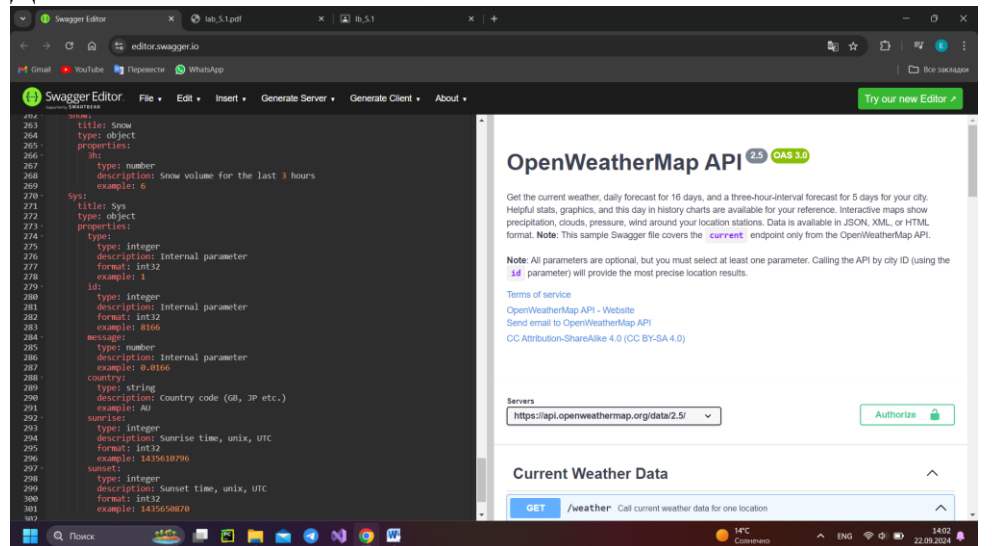
Paths



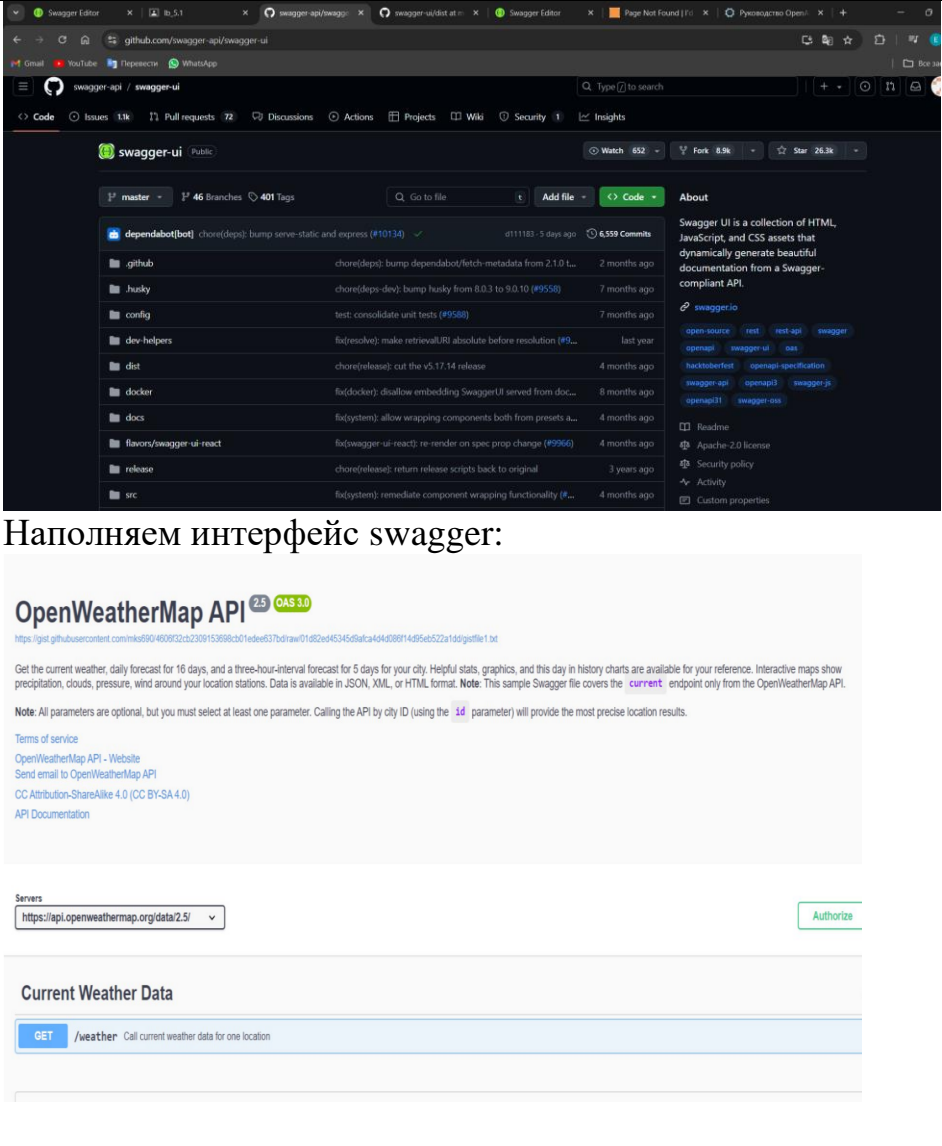
Проверка редактирования (try it out)



Добавление остальных объектов



5. Интеграция спецификации опенари в swagger. Переходим по ссылке <https://github.com/swagger-api/swagger-ui> и выполняем все действия

	 <p>The screenshot shows the Swagger UI GitHub repository interface. The top part displays the repository's metadata, including 652 watches, 8.9k forks, and 26.3k stars. Below this is a list of recent commits with details like the committer, message, and time. The bottom part of the screenshot shows a sample API definition for the OpenWeatherMap API, version 2.5. The API description includes details about the current weather, daily forecast, and a three-hour interval forecast. It also mentions that data is available in JSON, XML, or HTML format. The API endpoint is <code>/weather</code>, and the method is <code>GET</code>. The API is titled "OpenWeatherMap API" and has a description: "Get the current weather, daily forecast for 16 days, and a three-hour-interval forecast for 5 days for your city. Helpful stats, graphics, and this day in history charts are available for your reference. Interactive maps show precipitation, clouds, pressure, wind around your location stations. Data is available in JSON, XML, or HTML format. Note: This sample Swagger file covers the `current` endpoint only from the OpenWeatherMap API. Note: All parameters are optional, but you must select at least one parameter. Calling the API by city ID (using the `id` parameter) will provide the most precise location results."</p>
Результат	В ходе данной работы мы научились работать с https://github.com/swagger-api/swagger-ui , редактировать спецификацию openapi

Листинг

openapi: 3.0.2

info:

title: "OpenWeatherMap API"

description: "Get the current weather, daily forecast for 16 days, and a three-hour-interval forecast for 5 days for your city. Helpful stats, graphics, and this day in history charts are available for your reference. Interactive maps show precipitation, clouds, pressure, wind around your location stations. Data is available in JSON, XML, or HTML format. **Note**: This sample Swagger file covers the `current` endpoint only from the OpenWeatherMap API.

 Note: All parameters are optional, but you must select at least one parameter. Calling the API by city ID (using the `id` parameter) will provide the most precise location results."

version: "2.5"

termsOfService: "https://openweathermap.org/terms"

contact:

name: "OpenWeatherMap API"

url: "https://openweathermap.org/api"

email: "some_email@gmail.com"

license:

name: "CC Attribution-ShareAlike 4.0 (CC BY-SA 4.0)"

url: "https://openweathermap.org/price"

servers:

- url: https://api.openweathermap.org/data/2.5/

paths:

/weather:

get:

tags:

- Current Weather Data

summary: "Call current weather data for one location"

description: "Access current weather data for any location on Earth including over 200,000 cities! Current weather is frequently updated based on global models and data from more than 40,000 weather stations."

operationId: CurrentWeatherData

parameters:

- \$ref: '#/components/parameters/q'
- \$ref: '#/components/parameters/id'
- \$ref: '#/components/parameters/lat'
- \$ref: '#/components/parameters/lon'
- \$ref: '#/components/parameters/zip'
- \$ref: '#/components/parameters/units'
- \$ref: '#/components/parameters/lang'
- \$ref: '#/components/parameters/mode'

responses:

200:

description: Successful response

content:

application/json:

schema:

\$ref: '#/components/schemas/200'

404:

description: Not found response

content:

text/plain:

schema:

title: Weather not found

type: string

example: Not found

components:

parameters:

q:

name: q

in: query

description: "***City name**". *Example: London*. You can call by city name, or by city name and country code. The API responds with a list of results that match a searching word. For the query value, type the city name and optionally the country code divided by a comma; use ISO 3166 country codes."

schema:

type: string

id:

name: id

in: query

description: "***City ID**". *Example: `2172797`*. You can call by city ID. The API responds with the exact result. The List of city IDs can be downloaded [here](<http://bulk.openweathermap.org/sample/>). You can include multiple cities in this parameter — just separate them by commas. The limit of locations is 20. *Note: A single ID counts as a one API call. So, if you have city IDs, it's treated as 3 API calls.*"

schema:

type: string

lat:

name: lat

in: query

description: "***Latitude**". *Example: 35*. The latitude coordinate of the location of your interest. Must use with `lon`."

schema:

type: string

lon:

name: lon

in: query

description: "***Longitude**". *Example: 139*. Longitude coordinate of the location of your interest. Must use with `lat`."

schema:

type: string

zip:

name: zip

in: query

description: "***Zip code**". Search by zip code. *Example: 95050,us*. Please note that if the country is not specified, the search uses USA as a default."

schema:

type: string

units:

name: units

in: query

description: "***Units**". *Example: imperial*. Possible values: `standard`, `metric`, and `imperial`. When you do not use the `units` parameter, the format is `standard` by default.'

schema:

type: string

enum: [standard, metric, imperial]

default: "imperial"

lang:

name: lang

in: query

description: "***Language**". *Example: en*. You can use lang parameter to get the output in your language. We support the following languages that you can use with the corresponded lang values: Arabic - `ar`, Bulgarian - `bg`, Catalan - `ca`, Czech - `cz`, German - `de`, Greek - `el`, English - `en`, Persian (Farsi) - `fa`, Finnish - `fi`, French - `fr`, Galician - `gl`, Croatian - `hr`, Hungarian - `hu`, Italian - `it`, Japanese - `ja`, Korean - `kr`, Latvian - `la`, Lithuanian - `lt`, Macedonian - `mk`, Dutch - `nl`, Polish - `pl`, Portuguese - `pt`, Romanian - `ro`, Russian - `ru`, Swedish - `se`, Slovak - `sk`, Slovenian - `sl`, Spanish - `es`, Turkish - `tr`, Ukrainian - `ua`, Vietnamese - `vi`, Chinese Simplified - `zh_cn`, Chinese Traditional - `zh_tw`.'

schema:

type: string

enum: [ar, bg, ca, cz, de, el, en, fa, fi, fr, gl, hr, hu, it, ja, kr, la, lt, mk, nl, pl, pt, ro, ru, se, sk, sl, es, tr, ua, vi, zh_cn, zh_tw]

default: "en"

mode:

name: mode

in: query

description: "***Mode**". *Example: html*. Determines the format of the response. Possible values are `xml` and `html`. If the mode parameter is empty, the format is `json` by default."

schema:

type: string

enum: [json, xml, html]

default: "json"

schemas:
200:
title: Successful response
type: object
properties:
coord:
\$ref: '#/components/schemas/Coord'
weather:
type: array
items:
\$ref: '#/components/schemas/Weather'
description: (more info Weather condition codes)
base:
type: string
description: Internal parameter
example: cmc stations
main:
\$ref: '#/components/schemas/Main'
visibility:
type: integer
description: Visibility, meter
example: 16093
wind:
\$ref: '#/components/schemas/Wind'
clouds:
\$ref: '#/components/schemas/Clouds'
rain:
\$ref: '#/components/schemas/Rain'
snow:
\$ref: '#/components/schemas/Snow'
dt:
type: integer
description: Time of data calculation, unix, UTC
format: int32
example: 1435658272
sys:
\$ref: '#/components/schemas/Sys'
id:
type: integer
description: City ID
format: int32
example: 2172797
name:
type: string

example: Cairns
cod:
type: integer
description: Internal parameter
format: int32
example: 200

Coord:
title: Coord
type: object
properties:
lon:
type: number
description: City geo location, longitude
example: 145.77000000000001
lat:
type: number
description: City geo location, latitude
example: -16.920000000000002

Weather:
title: Weather
type: object
properties:
id:
type: integer
description: Weather condition id
format: int32
example: 803
main:
type: string
description: Group of weather parameters (Rain, Snow, Extreme etc.)
example: Clouds
description:
type: string
description: Weather condition within the group
example: broken clouds
icon:
type: string
description: Weather icon id
example: 04n

Main:
title: Main
type: object
properties:
temp:
type: number

description: 'Temperature. Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.'

example: 293.25

pressure:

type: integer

description: Atmospheric pressure (on the sea level, if there is no sea_level or grnd_level data), hPa

format: int32

example: 1019

humidity:

type: integer

description: Humidity, %

format: int32

example: 83

temp_min:

type: number

description: 'Minimum temperature at the moment. This is deviation from current temp that is possible for large cities and megalopolises geographically expanded (use these parameter optionally). Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.'

example: 289.81999999999999

temp_max:

type: number

description: 'Maximum temperature at the moment. This is deviation from current temp that is possible for large cities and megalopolises geographically expanded (use these parameter optionally). Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.'

example: 295.37

sea_level:

type: number

description: Atmospheric pressure on the sea level, hPa

example: 984

grnd_level:

type: number

description: Atmospheric pressure on the ground level, hPa

example: 990

Wind:

title: Wind

type: object

properties:

speed:

type: number

description: 'Wind speed. Unit Default: meter/sec, Metric: meter/sec, Imperial: miles/hour.'

example: 5.0999999999999996

deg:
type: integer
description: Wind direction, degrees (meteorological)
format: int32
example: 150

Clouds:
title: Clouds
type: object
properties:
all:
type: integer
description: Cloudiness, %
format: int32
example: 75

Rain:
title: Rain
type: object
properties:
3h:
type: integer
description: Rain volume for the last 3 hours
format: int32
example: 3

Snow:
title: Snow
type: object
properties:
3h:
type: number
description: Snow volume for the last 3 hours
example: 6

Sys:
title: Sys
type: object
properties:
type:
type: integer
description: Internal parameter
format: int32
example: 1
id:
type: integer
description: Internal parameter
format: int32
example: 8166

message:
 type: number
 description: Internal parameter
 example: 0.0166
country:
 type: string
 description: Country code (GB, JP etc.)
 example: AU
sunrise:
 type: integer
 description: Sunrise time, unix, UTC
 format: int32
 example: 1435610796
sunset:
 type: integer
 description: Sunset time, unix, UTC
 format: int32
 example: 1435650870

securitySchemes:

 app_id:
 type: apiKey
 description: API key to authorize requests. If you don't have an
OpenWeatherMap API key, use `fd4698c940c6d1da602a70ac34f0b147`.
 name: appid
 in: query

externalDocs:

 description: API Documentation
 url: <https://openweathermap.org/api>