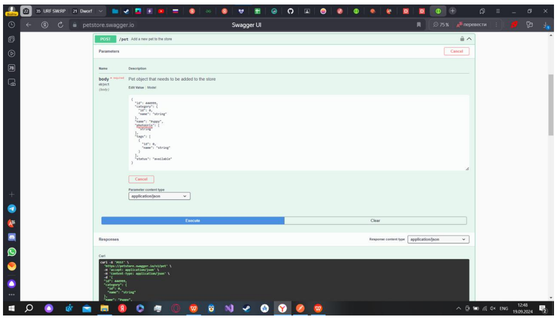
Тема лабораторной работы	lb_5_1
Выполняющий	Кутенков Константин
Помогающий	Наглов Виктор

Ход работы

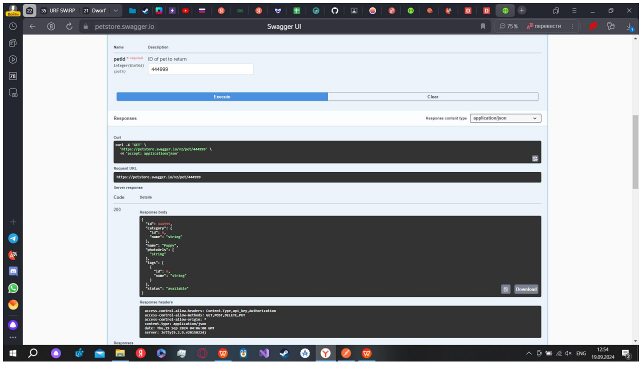
1. Рассмотрев лабораторную работу, мы приступили к ее выполнению
2. Мы зашли на сайт petstore.swagger.io и добавили нового питомца Puppy с id 444999



```
{
  "id": 444999,
  "category": {
    "id": 0,
    "name": "string"
  },
  "name": "Puppy",
  "photoUrls": [
    "string"
  ],
  "tags": [
    {
      "id": 0,
      "name": "string"
    }
  ],
  "status": "available"
}
```

```
curl -X 'POST' \
  'https://petstore.swagger.io/v2/pet' \
  -H 'accept: application/json' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 444999,
  "category": {
    "id": 0,
    "name": "string"
  },
  "name": "Puppy",
```

3. Теперь, развернув вкладку GET/pet/{petId}, найдем нашего питомца



```
curl -X 'GET' \
  'https://petstore.swagger.io/v2/pet/444999' \
  -H 'accept: application/json'
```

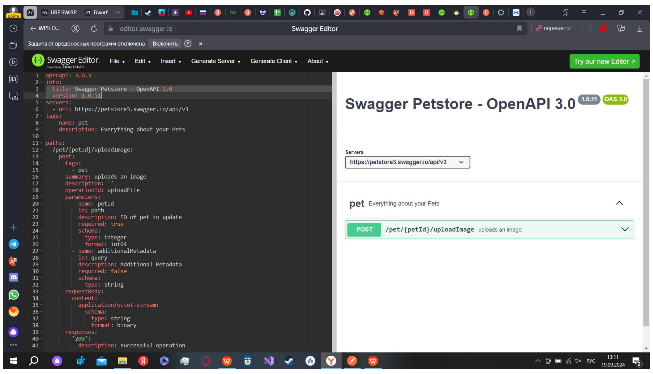
```
https://petstore.swagger.io/v2/pet/444999
```

```
{
  "id": 444999,
  "category": {
    "id": 0,
    "name": "string"
  },
  "name": "Puppy",
  "photoUrls": [
    "string"
  ],
  "tags": [
    {
      "id": 0,
      "name": "string"
    }
  ],
  "status": "available"
}
```

```
access-control-allow-headers: Content-Type,api_key,Authorization
access-control-allow-methods: GET,POST,DELETE,PUT
access-control-allow-origin: *
content-type: application/json
date: Thu,19 Sep 2024 04:06:00 GMT
server: Jetty(9.2.9.v20150224)
```

Как видим, он нашелся

4. Используя редактор спецификации OpenAPI, идем шаг за шагом, вставляя объекты



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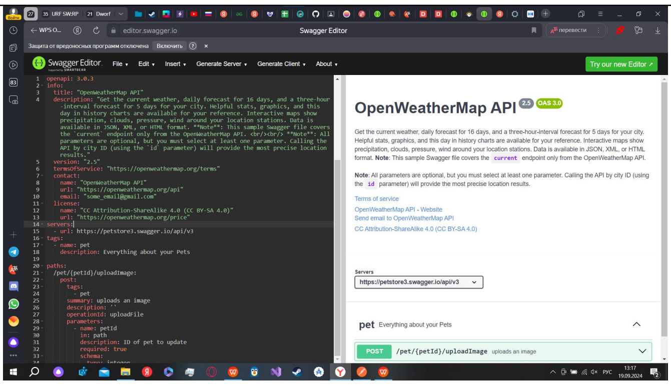
Swagger Petstore - OpenAPI 3.0
1.0.11
OAS 3.0
Servers
https://petstore3.swagger.io/api/v3
pet Everything about your Pets
POST /pet/{petId}/uploadImage uploads an image

```
openapi: 3.0.3
info:
  title: Swagger Petstore - OpenAPI 3.0
  version: 1.0.11
servers:
  - url: https://petstore3.swagger.io/api/v3
tags:
  - name: pet
    description: Everything about your Pets

paths:
  /pet/{petId}/uploadImage:
    post:
      tags:
        - pet
      summary: uploads an image
      description: ''
      operationId: uploadFile
      parameters:
        - name: petId
          in: path
          description: ID of pet to update
          required: true
          schema:
            type: integer
            format: int64
        - name: additionalMetadata
          in: query
          description: Additional Metadata
          required: false
          schema:
            type: string
      requestBody:
        content:
          application/octet-stream:
            schema:
              type: string
              format: binary
      responses:
        '200':
          description: successful operation
```

Здесь мы вставили код с OpenAPI

5. Следуя шагу 2, добавили объект info



```yaml
openapi: 3.0.3
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. <br/><br/> **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://petstore3.swagger.io/api/v3
tags:
  - name: pet
    description: Everything about your Pets

paths:
  /pet/{petId}/uploadImage:
    post:
      tags:
        - pet
      summary: uploads an image
      description: ''
      operationId: uploadFile
      parameters:
        - name: petId
          in: path
          description: ID of pet to update
          required: true
          schema:
            type: integer
```

OpenWeatherMap API 2.5 OAS 3.0

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.

Servers: https://petstore3.swagger.io/api/v3

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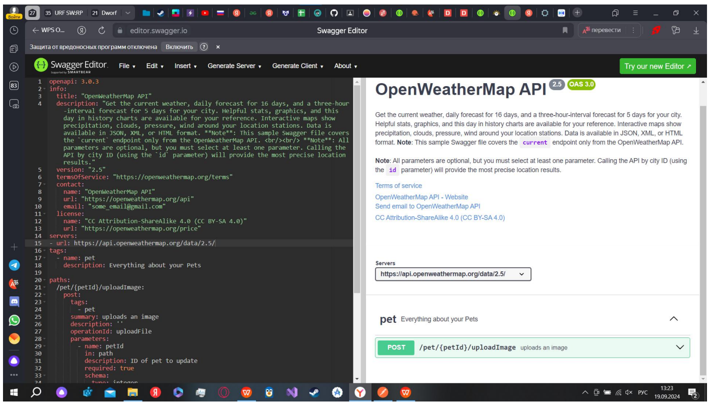
pet Everything about your Pets
POST /pet/{petId}/uploadImage uploads an image
13:17
19.09.2024

Теперь все выглядит вот так

6. Аналогично добавляем объект servers из шага 3



```yaml
openapi: 3.0.3
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. <br/><br/> **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/
tags:
  - name: pet
    description: Everything about your Pets

paths:
  /pet/{petId}/uploadImage:
    post:
      tags:
        - pet
      summary: uploads an image
      description: ''
      operationId: uploadFile
      parameters:
        - name: petId
          in: path
          description: ID of pet to update
          required: true
          schema:
            type: integer
```

OpenWeatherMap API 2.5 OAS 3.0

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.

Servers: https://api.openweathermap.org/data/2.5/

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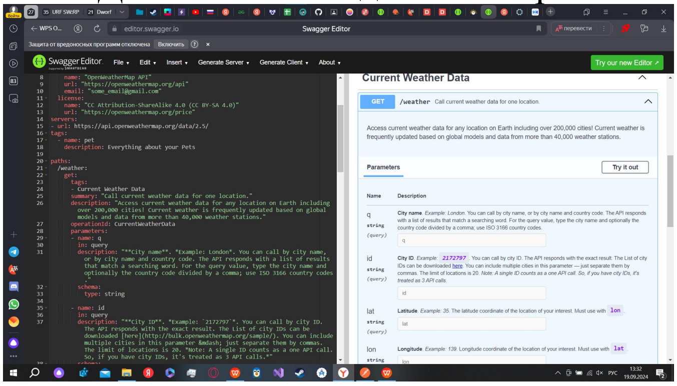
CC Attribution-ShareAlike 4.0 (CC BY-SA 4.0)
pet Everything about your Pets
POST /pet/{petId}/uploadImage uploads an image
13:23
19.09.2024

Как можно заметить строчка Servers, обладает другой ссылкой

7. Далее из шага 4 добавляем paths



```yaml
    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/
tags:
  - name: pet
    description: Everything about your Pets

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:
      - 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

      - 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 &mdash; 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.*"
```

Current Weather Data

GET /weather Call current weather data for one location.

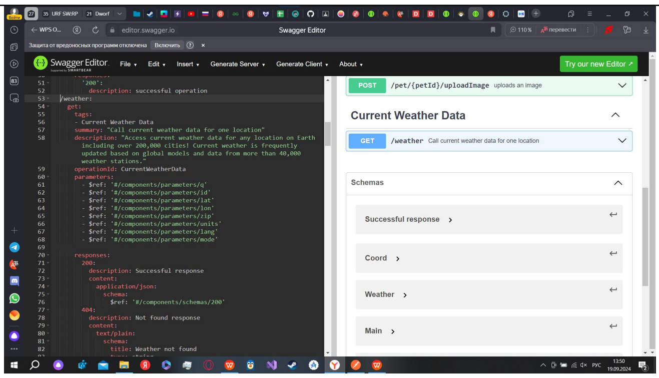
Access current weather data for any location on Earth including over 200,000 cities! Current weather is frequently updated based on global models and data from more than 40,000 weather stations.

Parameters

Name	Description
q string *(query)*	**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. q
id string *(query)*	**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. 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.* id
lat string *(query)*	**Latitude**. *Example: 35.* The latitude coordinate of the location of your interest. Must use with `lon`. lat
lon string	**Longitude**. *Example: 139.* Longitude coordinate of the location of your interest. Must use with `lat`. lon

Как видно выше появилась вкладка Current Weather Data

8. Теперь из шага 5 добавляем components



```yaml
        '200':
          description: successful operation
/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
```

POST /pet/{petId}/uploadImage uploads an image

Current Weather Data

GET /weather Call current weather data for one location

Schemas

Successful response ›

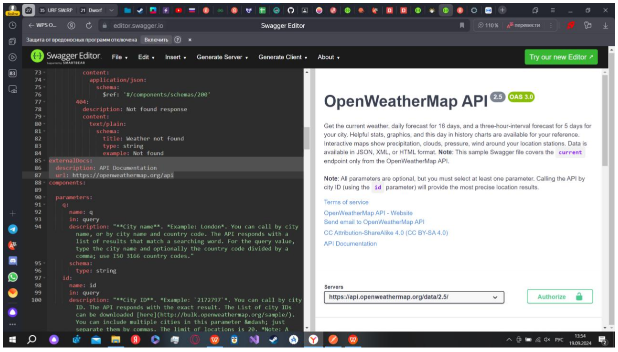
Coord ›

Weather ›

Main ›

components был успешно добавлен

9. И из шага 8 добавили externaDocs



```yaml
          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
externalDocs:
  description: API Documentation
  url: https://openweathermap.org/api
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 &mdash; just
        separate them by commas. The limit of locations is 20. *Note: A
```

OpenWeatherMap API 2.5 OAS 3.0

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.

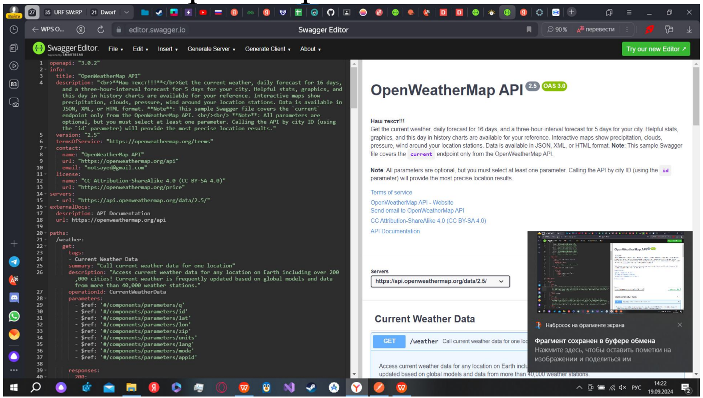
Note: All parameters are optional, but you must select at least one parameter. Calling the API by city ID (using the `id` parameter) will provide the most precise location results.

Terms of service
OpenWeatherMap API - Website
Send email to OpenWeatherMap API
CC Attribution-ShareAlike 4.0 (CC BY-SA 4.0)
API Documentation

Servers
https://api.openweathermap.org/data/2.5/

И вот ниже появилась ссылка API Documentation

10. В объекте info в description мы добавили текст и поменяли в description в parameters



```yaml
openapi: "3.0.2"
info:
  title: "OpenWeatherMap API"
  description: "<br>**Наш текст!!!**</br>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. <br/><br/> **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: "notsayed@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/"
externalDocs:
  description: API Documentation
  url: https://openweathermap.org/api

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'
        - $ref: '#/components/parameters/appid'

      responses:
        200:
```

OpenWeatherMap API 2.5 OAS 3.0

Наш текст!!!
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.

Terms of service
OpenWeatherMap API - Website
Send email to OpenWeatherMap API
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API Documentation

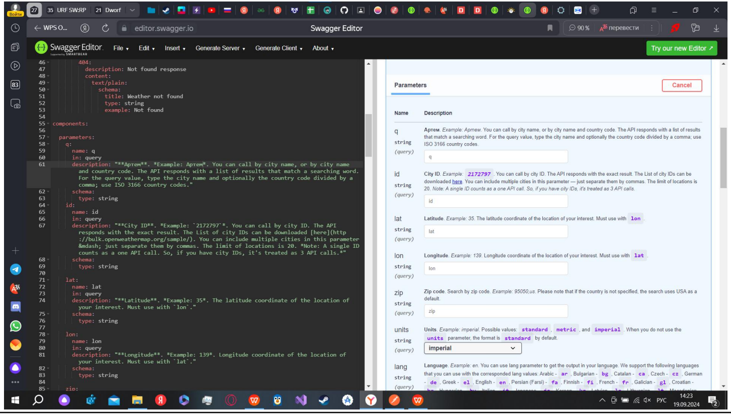
Servers
https://api.openweathermap.org/data/2.5/

Current Weather Data

GET /weather Call current weather data for one location

Access current weather data for any location on Earth inclu… updated based on global models and data from more than 40,000 weather stations.

Фрагмент сохранен в буфере обмена
Нажмите здесь, чтобы оставить пометки на изображении и поделиться им



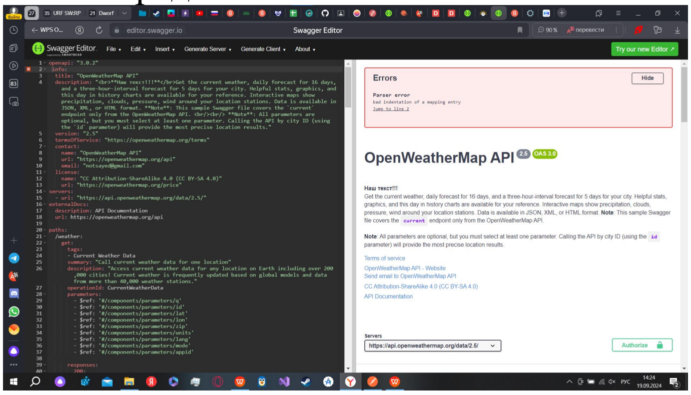
```yaml
        404:
          description: Not found response
          content:
            text/plain:
              schema:
                title: Weather not found
                type: string
                example: Not found

components:

  parameters:
    q:
      name: q
      in: query
      description: "**Артем**. *Example: Артем*. 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
        &mdash; 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:
```

Parameters

Name	Description
q string *(query)*	**Артем**. *Example: Артем*. 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. q
id string *(query)*	**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. 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.* id
lat string *(query)*	**Latitude**. *Example: 35*. The latitude coordinate of the location of your interest. Must use with `lon`. lat
lon string *(query)*	**Longitude**. *Example: 139*. Longitude coordinate of the location of your interest. Must use with `lat`. lon
zip string *(query)*	**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. zip
units string *(query)*	**Units**. *Example: imperial*. Possible values: `standard`, `metric`, and `imperial`. When you do not use the `units` parameter, the format is `standard` by default. imperial
lang string *(query)*	**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 -

Описание изменилось (Наш текст!)

11.Попробуем добавить лишний пробел перед info и появится ошибка



```
openapi: "3.0.2"
 info:
  title: "OpenWeatherMap API"
  description: "<br>**Наш текст!!!**</br>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. <br/><br/> **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: "notsayed@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/"
externalDocs:
  description: API Documentation
  url: https://openweathermap.org/api

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'
        - $ref: '#/components/parameters/appid'

      responses:
        200:
```

Errors

Parser error
bad indentation of a mapping entry
Jump to line 2

OpenWeatherMap API 2.5 OAS 3.0

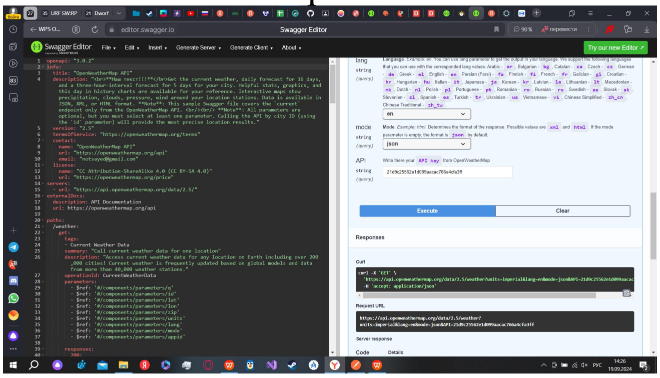
Наш текст!!!
Get the current weather, daily forecast for 16 days, and a three-hour-interval forecast for 5 days for your city. Helpful stats, graphics, and this day in history charts are available for your reference. Interactive maps show precipitation, clouds, pressure, wind around your location stations. 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.

Terms of service
OpenWeatherMap API - Website
Send email to OpenWeatherMap API
CC Attribution-ShareAlike 4.0 (CC BY-SA 4.0)
API Documentation

Servers
https://api.openweathermap.org/data/2.5/

12.Развернули секцию GET нажали Try It Out и посмотрели на ответ



```
openapi: "3.0.2"
info:
  title: "OpenWeatherMap API"
  description: "<br>**Наш текст!!!**</br>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. <br/><br/> **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: "notsayed@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/"
externalDocs:
  description: API Documentation
  url: https://openweathermap.org/api

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'
        - $ref: '#/components/parameters/appid'

      responses:
        200:
```

lang
string
(query)
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`.
en

mode
string
(query)
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.
json

API
string
(query)
Write there your `API key` from OpenWeatherMap
21d9c25562e1d099aacac766a4cfa3ff

Responses

Curl

```
curl -X 'GET' \
  'https://api.openweathermap.org/data/2.5/weather?units=imperial&lang=en&mode=json&API=21d9c25562e1d099aacac
  -H 'accept: application/json'
```

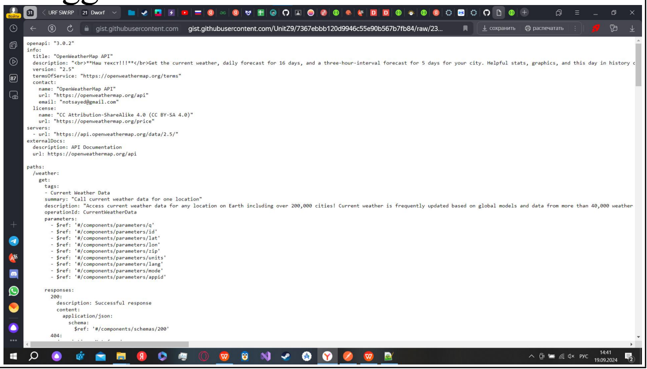
Request URL

```
https://api.openweathermap.org/data/2.5/weather?units=imperial&lang=en&mode=json&API=21d9c25562e1d099aacac766a4cfa3ff
```

Server response

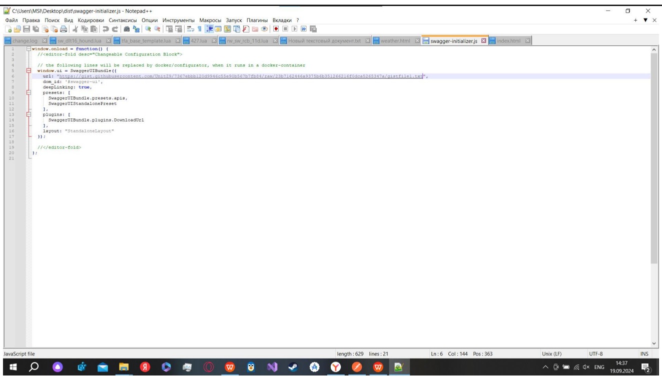
Code Details

13. Теперь переходим к след. заданию. Скачиваем zip по ссылке, открываем его, вытаскиваем папку dist и редактируем файл swagger-initializer.js, путем замены начальной ссылки на ссылку с GitHub Gist, которую мы там получили скопировав ссылку из swagger.



gist.githubusercontent.com/UnitZ9/7367ebbb120d9946c55e90b567b7fb84/raw/23...

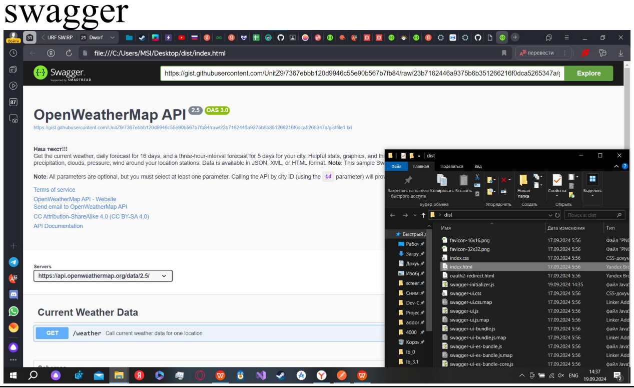
```
openapi: "3.0.2"
info:
  title: "OpenWeatherMap API"
  description: "<br>**Наш текст!!!**</br>Get the current weather, daily forecast for 16 days, and a three-hour-interval forecast for 5 days for your city. Helpful stats, graphics, and this day in history c
  version: "2.5"
  termsOfService: "https://openweathermap.org/terms"
  contact:
    name: "OpenWeatherMap API"
    url: "https://openweathermap.org/api"
    email: "notsayed@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/"
externalDocs:
  description: API Documentation
  url: https://openweathermap.org/api

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
      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'
        - $ref: '#/components/parameters/appid'

      responses:
        200:
          description: Successful response
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/200'
        404:
```



C:\Users\MSI\Desktop\dist\swagger-initializer.js - Notepad++

```
window.onload = function() {
  //<editor-fold desc="Changeable Configuration Block">

  // the following lines will be replaced by docker/configurator, when it runs in a docker-container
  window.ui = SwaggerUIBundle({
    url: "https://gist.githubusercontent.com/UnitZ9/7367ebbb120d9946c55e90b567b7fb84/raw/23b7162446a9375b6b351266216f0dca5265347a/gistfile1.txt",
    dom_id: '#swagger-ui',
    deepLinking: true,
    presets: [
      SwaggerUIBundle.presets.apis,
      SwaggerUIStandalonePreset
    ],
    plugins: [
      SwaggerUIBundle.plugins.DownloadUrl
    ],
    layout: "StandaloneLayout"
  });

  //</editor-fold>
};
```

После запуска файла index.html, мы видим что у нас все успешно запустилось и мы видим тот самый “сайт” который мы сделали через
swagger



file:///C:/Users/MSI/Desktop/dist/index.html

https://gist.githubusercontent.com/UnitZ9/7367ebbb120d9946c55e90b567b7fb84/raw/23b7162446a9375b6b351266216f0dca5265347a/gistfile1.txt

OpenWeatherMap API 2.5 OAS 3.0

https://gist.githubusercontent.com/UnitZ9/7367ebbb120d9946c55e90b567b7fb84/raw/23b7162446a9375b6b351266216f0dca5265347a/gistfile1.txt

Наш текст!!!
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 thi
precipitation, clouds, pressure, wind around your location stations. Data is available in JSON, XML, or HTML format. **Note**: This sample Sw

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

Terms of service

OpenWeatherMap API - Website

Send email to OpenWeatherMap API

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API Documentation

Servers

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

Current Weather Data

GET /weather Call current weather data for one location

dist

Имя	Дата изменения	Тип
favicon-16x16.png	17.09.2024 5:56	Файл "PNG
favicon-32x32.png	17.09.2024 5:56	Файл "PNG
index.css	17.09.2024 5:56	CSS-докум
index.html	17.09.2024 5:56	Yandex Bro
oauth2-redirect.html	17.09.2024 5:56	Yandex Bro
swagger-initializer.js	19.09.2024 14:35	файл JavaS
swagger-ui.css	17.09.2024 5:56	CSS-докум
swagger-ui.css.map	17.09.2024 5:56	Linker Add
swagger-ui.js	17.09.2024 5:56	файл JavaS
swagger-ui.js.map	17.09.2024 5:56	Linker Add
swagger-ui-bundle.js	17.09.2024 5:56	файл JavaS
swagger-ui-bundle.js.map	17.09.2024 5:56	Linker Add
swagger-ui-es-bundle.js	17.09.2024 5:56	файл JavaS
swagger-ui-es-bundle.js.map	17.09.2024 5:56	Linker Add
swagger-ui-es-bundle-core.js	17.09.2024 5:56	файл JavaS

Результат

После проделанной нами работы, по итогу можно сказать что:
1. Мы научились относительно самостоятельно создавать сайты при помощи swagger, а также подробных инструкций другого сайта.
2. Так же проверили работоспособность нашего сайта, запустив его html через браузер и как итог он работает!

Программный код “сайта”:

```
openapi: "3.0.2"
info:
  title: "OpenWeatherMap API"
  description: "<br>**Наш текст!!!**</br>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. <br/><br/> **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: "notsayed@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/"
externalDocs:
  description: API Documentation
  url: https://openweathermap.org/api

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'
        - $ref: '#/components/parameters/appid'

      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: "**Артем**. *Example: Артем*. 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 &mdash; 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
```

```yaml
    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"
    appid:
      name: API
      in: query
      description: "Write there your `API key` from OpenWeatherMap"
      schema:
        type: string

  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
```