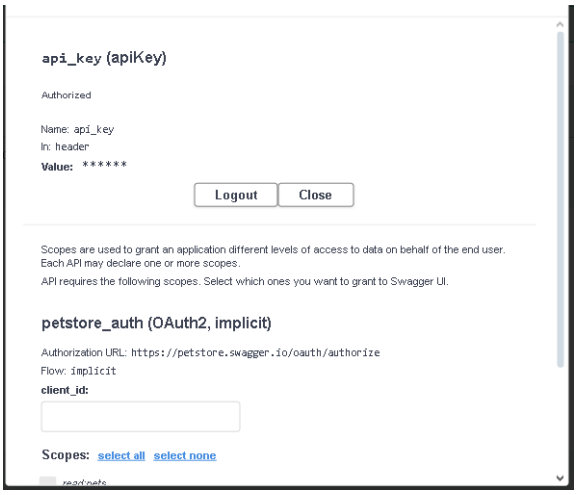
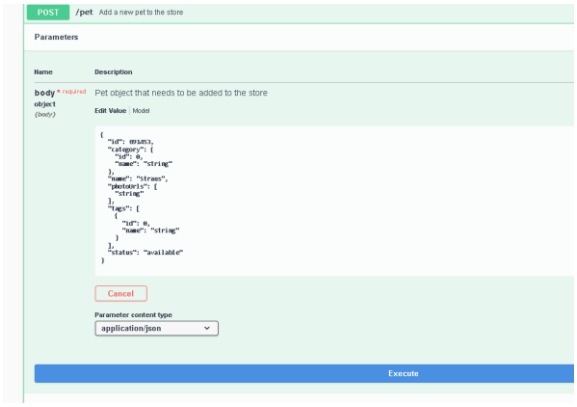
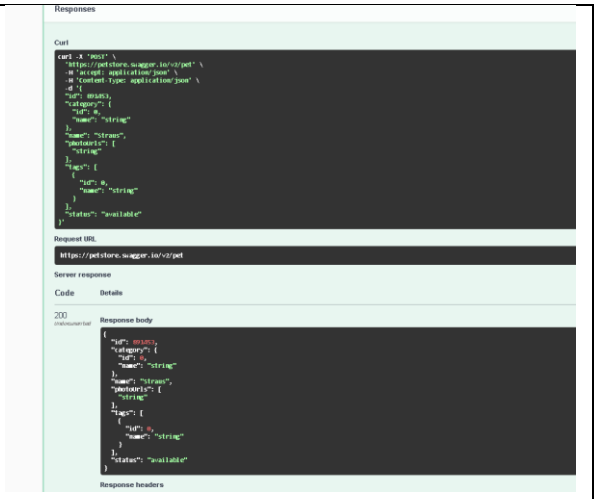
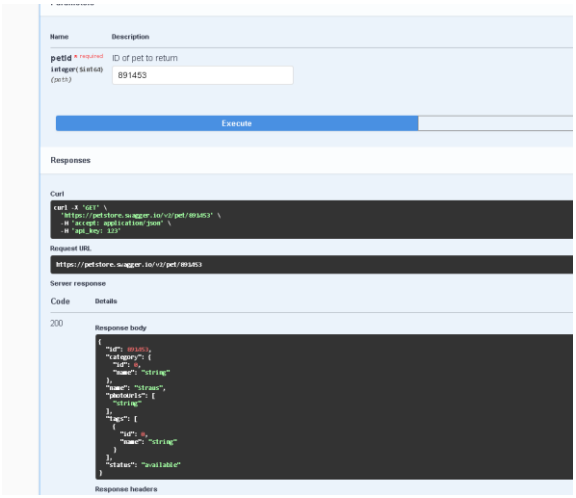
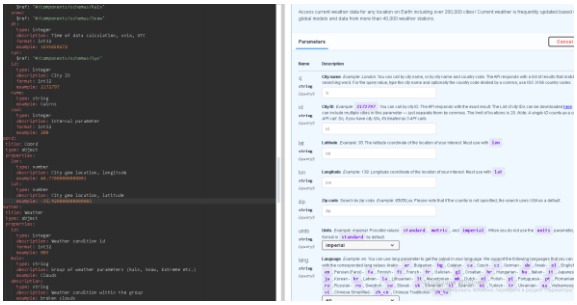
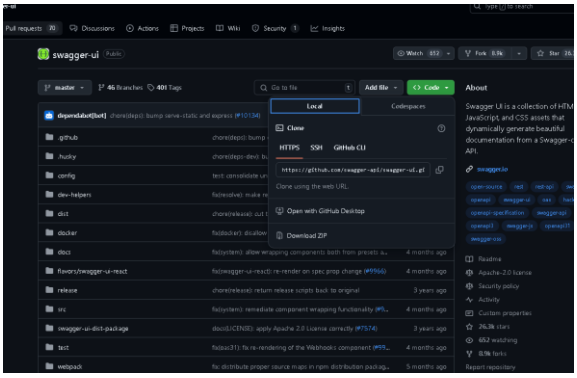
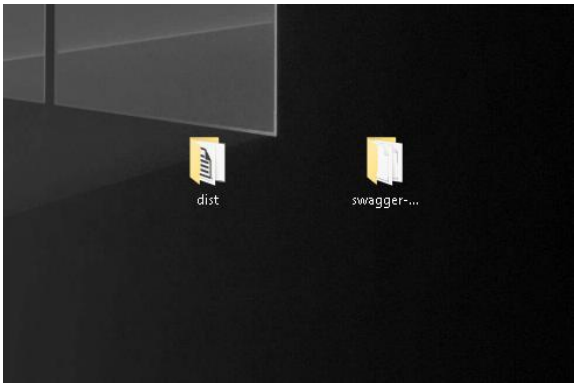
Тема лабораторной работы	Lb_5.1
Выполняющий	Шматов Иван
Помогающий	Плотников Дмитрий
Ход работы	1. Авторизуемся в Swagger  2. Изменяем тело запроса  3. Отправляем запрос и получаем curl

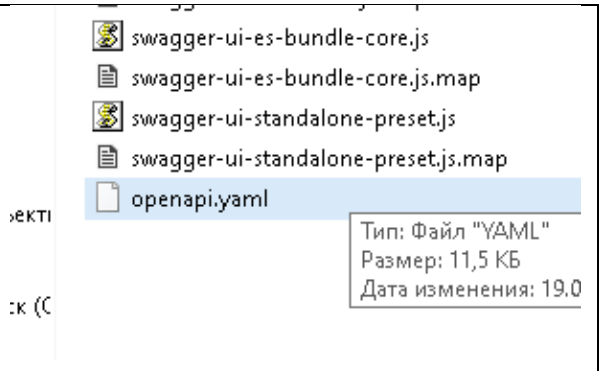
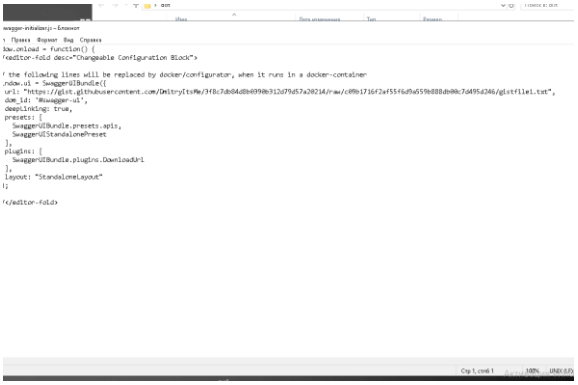
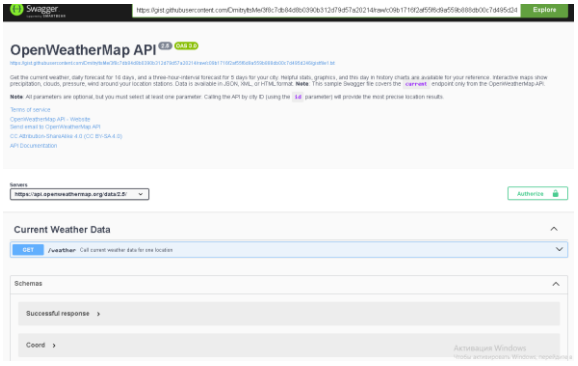


4. Ввели айди питомца и выполнил запрос



5. Отредактировали спцеификацию API в Swagger Editor (При попытке запроса не возвращает необходимые данные в

	связи с проблемами работы OpenWeather)  6. Перешли на Swagger UI GitHub project и скачали архив на компьютер  7. Извлекли папку dist из архива  8. Переместили файл спецификации в папку dist

	 9. В файле изменили ссылку, которую получили загрузив на GitHub Gis спецификацию OpenWeather  10. Открыли html файл 
Результат	В ходе работы: 1. Научились работать со спецификациями в Swagger Editor 2. Научились пользоваться Swagger Editor 3. Научились создавать спецификации 4. Улучшили навыки создания запросов

Листинг из Swagger Editor

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. <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: "**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 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"
  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
```