Lab: HTTP and REST

Problems for in-class lab for the "JS Front-End" course @ SoftUni.

1. REST Countries

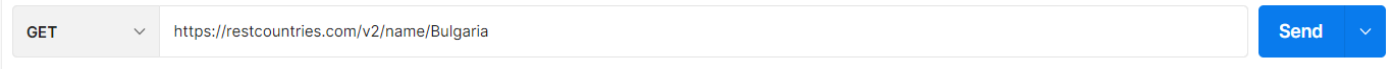
NOTE: Install "Postman" REST Client to **ease** your tasks.

Your first task is to get detailed information about Bulgaria.

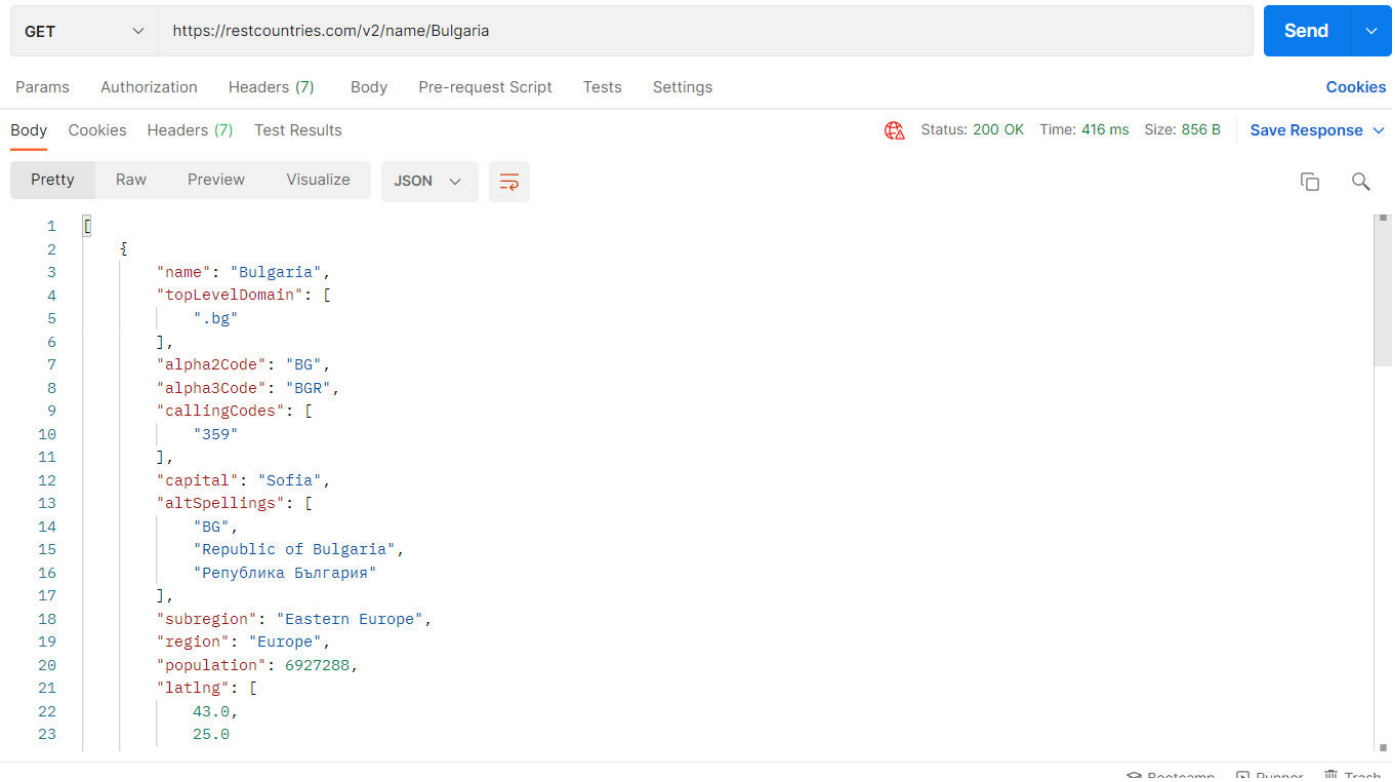
- Send a "**GET**" request to the link given below.
- **Copy** the response in JSON format.

REQUEST:

https://restcountries.com/v2/name/Bulgaria



RESPONSE:



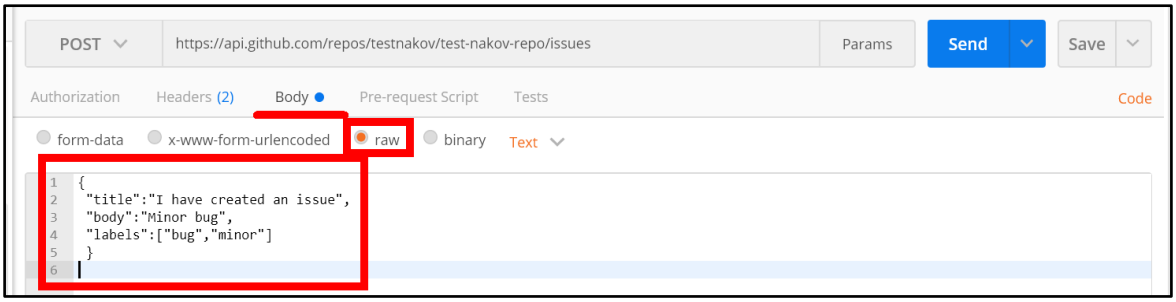

```
[
    {
        "name": "Bulgaria",
        "topLevelDomain": [
            ".bg"
        ],
        "alpha2Code": "BG",
        "alpha3Code": "BGR",
        "callingCodes": [
            "359"
        ],
        "capital": "Sofia",
        "altSpellings": [
            "BG",
            "Republic of Bulgaria",
            "Република България"
        ],
        "subregion": "Eastern Europe",
        "region": "Europe",
        "population": 6927288,
        "latlng": [
            43.0,
            25.0
```

2. GitHub: Labels Issue

Get the **first** issue from repository with **name** “test-nakov-repo”. Send a GET request to **https://api.github.com/repos/testnakov/test-nakov-repo/issues/:id**, where **:id** is the issue.

3. Github: Create Issue

This time we have to **create** an issue (data should be **send** to the server). Send a "**POST**" request to the server with the following JSON as **body** (send it as **application/json**):



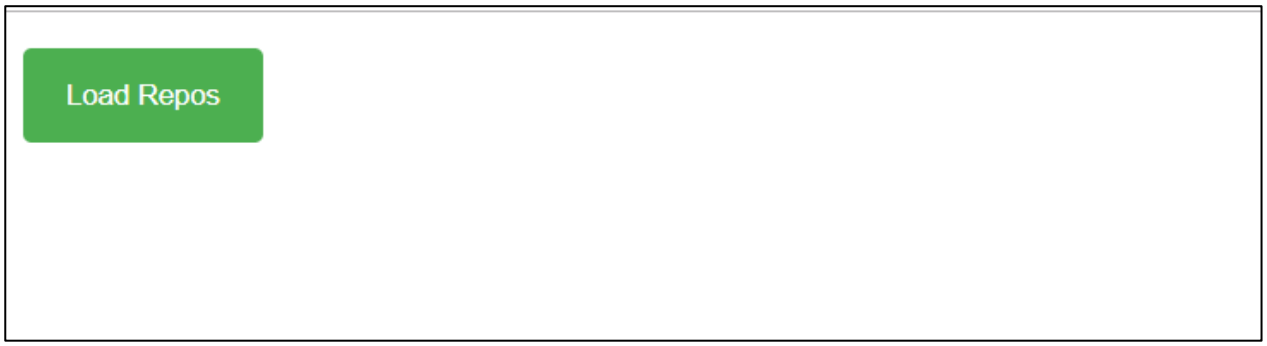
You need to use your GitHub **account credentials** to submit issues. Under the Authorization tab, select Basic and enter your username and password. Send the request to the URI from the previous task, but without the **:id**.

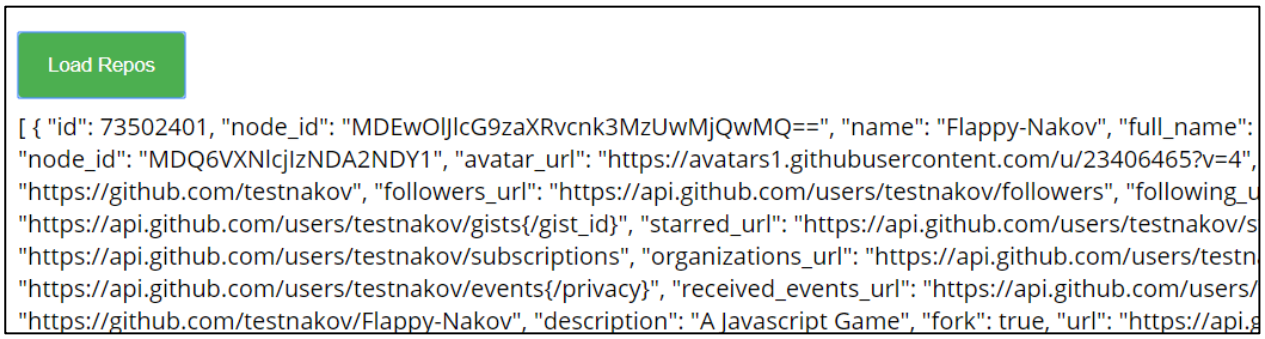
4. GitHub Repos

Your task is to **write** a JS function that **loads** a github repository **asynchronously with AJAX**. You should **use the Fetch API.** Obtain the data by making a **GET** request to the following URL: **"`https://api.github.com/users/testnakov/repos`"**

Transform the **body** to **text** with **res.text()** and in the second **then()** block of the **Promise** replace the text content of a **div** element with **id "res"** with the value from the response. **Do not format** the response in any way.

Examples

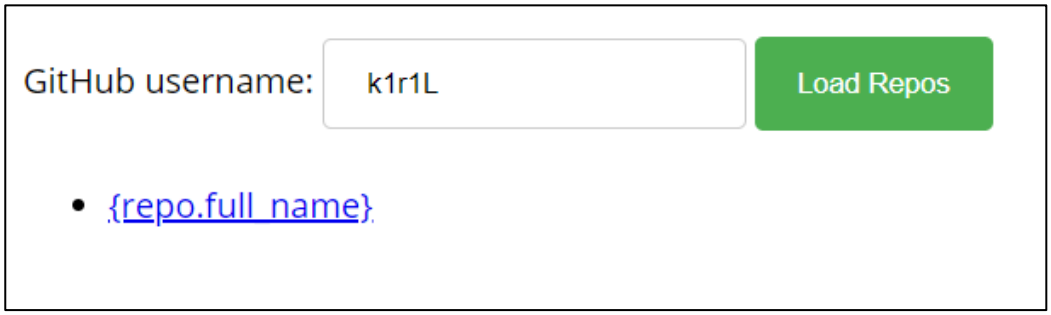


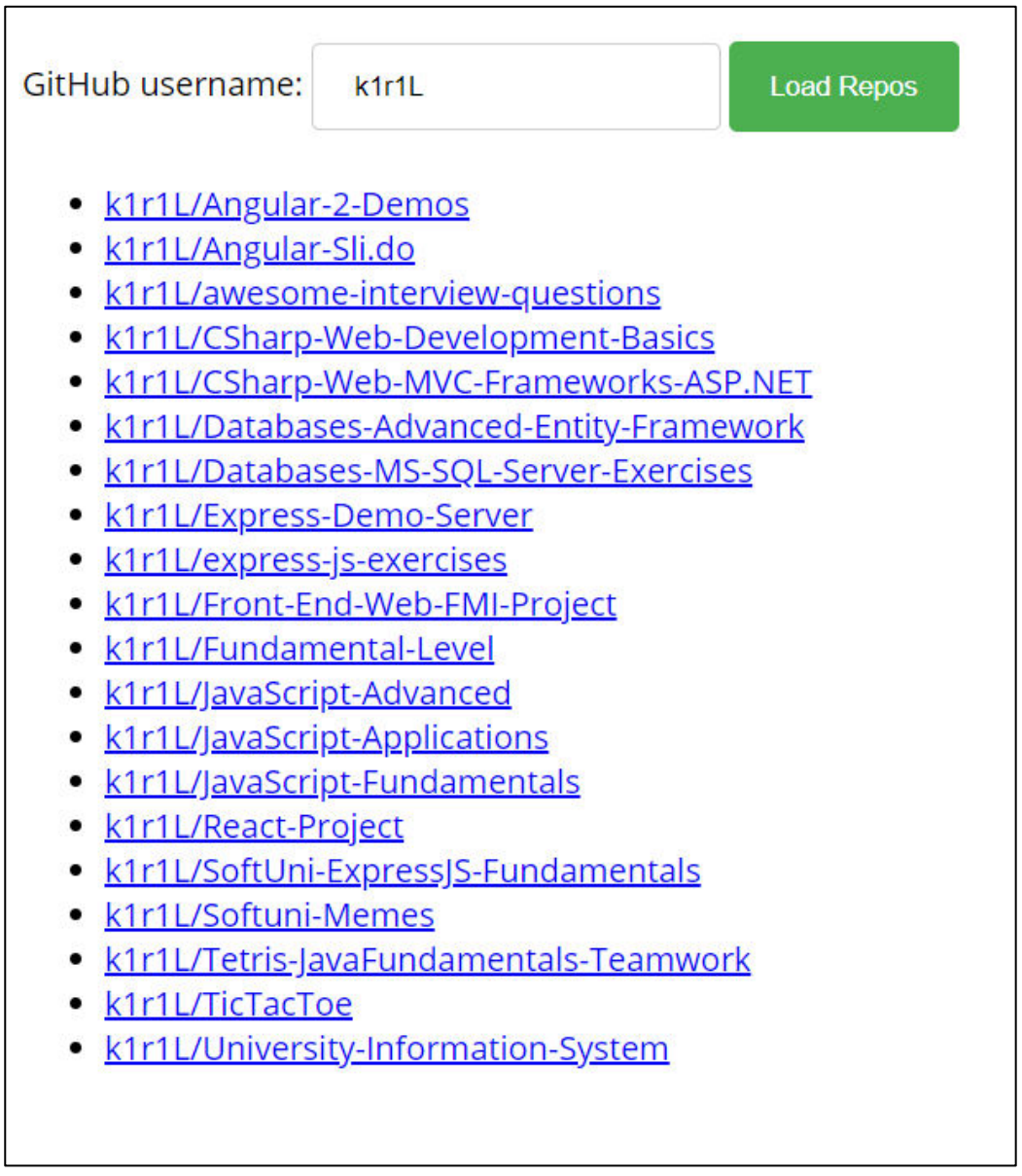


5. Github Repos By Username

Your task is to **write** a JS function that **executes** an **AJAX** request with **Fetch API** and loads all user **github repositories** by a given username (taken from an input field with **id "username"**) into a **list** (each repository as a **list-item**) with **id** "**repos**". Use the properties **full_name** and **html_url** of the returned objects to create a link to each repo's GitHub page. If an **error** occurs (like 404 "Not Found"), **append** to the list a list-item with **text** the current instead. Clear the contents of the list before any new content is appended. See the **highlighted lines** of the skeleton for formatting details of each list item.

Examples





6. Github Commits

Write a JS program that loads all commit messages and their authors from a github repository using a given HTML.

The **`loadCommits()`** function should get the **username** and **repository** from the HTML textboxes with IDs **`"username"`** and **`"repo"`** and make a **GET** request to the **Github API**:
`https://api.github.com/repos/<username>/<repository>/commits`

Swap **`<username>`** and **`<repository>`** with the ones from the HTML:

- In case of **success**, for **each** entry add a **list item** (**`<li>`**) in the **unordered list** (**`<ul>`**) with **id** **`"commits"`** with text in the following format:
  `"<commit.author.name>: <commit.message>"`
- In case of an **error**, add a single **list item** (**`<li>`**) with text in the following format:
  `"Error: <error.status> (Not Found)"`

Screenshots: