Lab: Asynchronous Programming

1. Github Commits

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

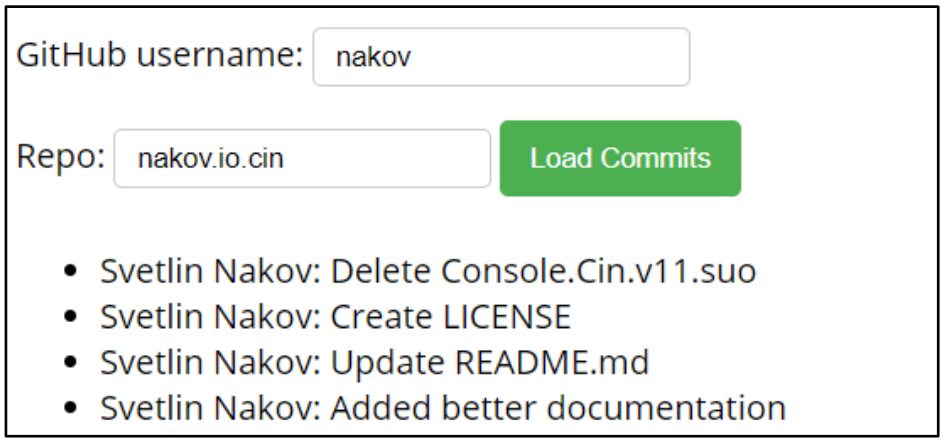
Skeleton will be provided in the **Resources folder**.

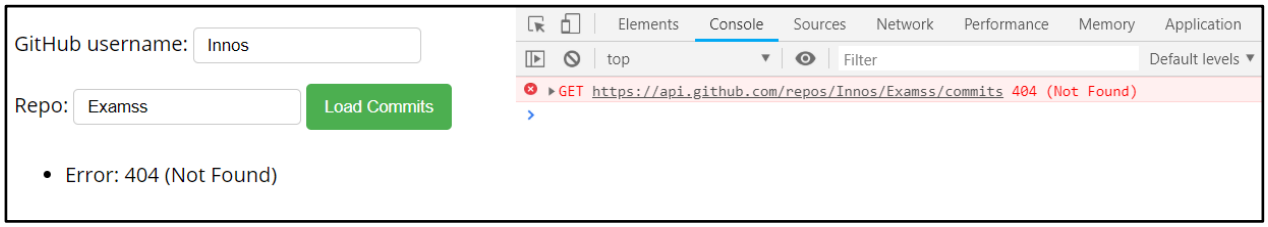
The **`loadCommits()`** function should get the **username** and **repository** from the HTML textboxes with IDs **`"username"`** and **`"repo"`** and make a **GET** request to the **Github API**:
`https://api.github.com/repos/<username>/<repository>/commits`

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> (<error.statusText>)"`

Screenshots:



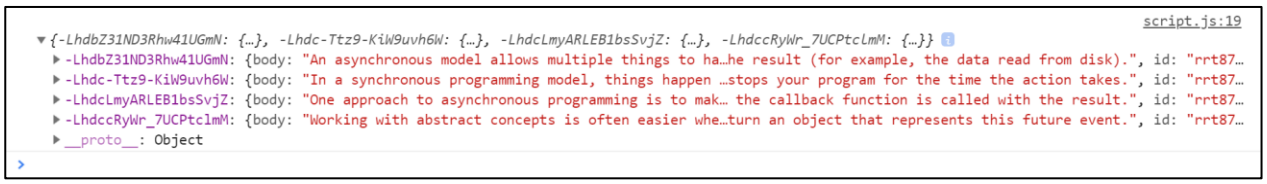


2. Blog

Write a program for reading blog content. It needs to make **requests** to the **server** and display **all blog posts** and their **comments**.
Firebase URL - https://blog-apps-c12bf.firebaseio.com/

Skeleton will be provided in the **Resources folder**.

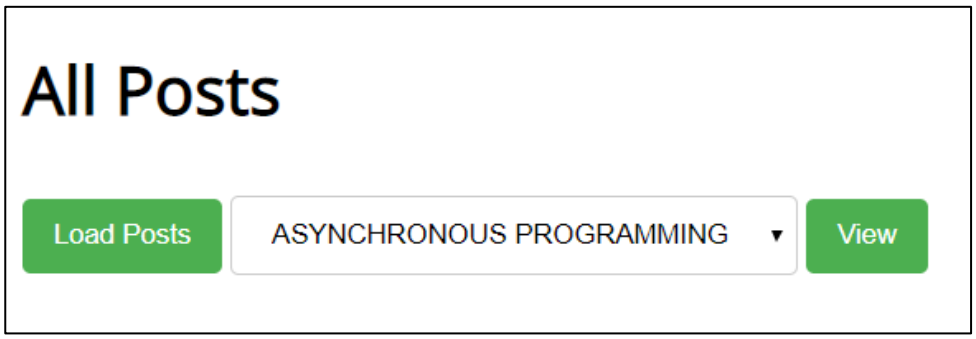
The button with ID "**`btnLoadPosts`**" should make a **GET** request to "**`/posts`**". The **response** from the **server** will be an **Object of objects.**



Each object will be in the following format:

```
{
  body: {postBody},
  id: {postId},
  title: {postTitle}
}
```

Create an **`<option>`** for each post using its **object key** as value and **current object title property** as text inside the node with ID "**`posts`**".




```
<select id="posts">
  <option value="-LhdbZ31ND3Rhw41UGmN">ASYNCHRONOUS PROGRAMMING</option>
  <option value="-Lhdc-Ttz9-KiW9uvh6W">SYNCHRONOUS PROGRAMMING</option>
  <option value="-LhdcLmyARLEB1bsSvjZ">CALLBACKS</option>
  <option value="-LhdccRyWr_7UCPtclmM">PROMISES</option>
</select>
```

When the button with ID "**`btnViewPost`**" is clicked, a **GET** request should be made to:

- "**`/posts/{postId}`**" to obtain the selected post (from the dropdown menu with ID "**`posts`**") - The following **request** will return **a single object** as described above.
- "**`/comments`** - to obtain all comments. The request will **return** a **Object** of **objects**.

Each object will be in the following format:

```
{
   id: {commentId},
   postId: {postId},
   text: {commentText}
}
```

You have to find this comments that are for the current post (check the **postId property**)

Display the post title inside **h1** with ID "**`post-title`**" and the post content inside **ul** with ID "**`post-body`**". Display **each comment** as a **`<li>`** inside **ul** with ID "**`post-comments`**". Do not forget to clear its content beforehand.