

Lesson 07 Demo 01

Consuming GitHub API Using Node.js

Objective: To fetch GitHub user data in Node.js application using GitHub API

Tools required: Node.js

Prerequisites: GitHub account

Steps to be followed:

1. Set up a Node.js project
2. Install required packages
3. Create a JavaScript script to fetch user data from GitHub

Step 1: Set up a Node.js project

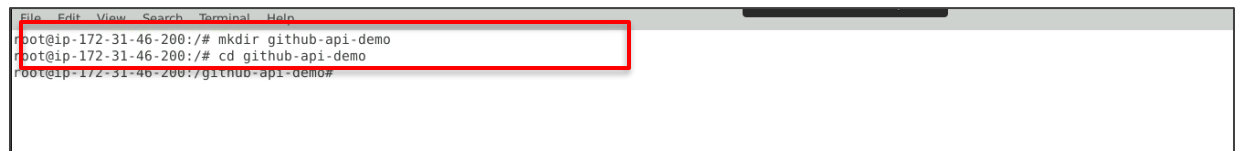
- 1.1 Launch the lab, then open the terminal and check the node.js version by using the command **node --version**



```
File Edit View Search Terminal Help
root@ip-172-31-46-200:/home/prakharguptasim# node --version
v17.2.0
root@ip-172-31-46-200:/home/prakharguptasim#
```

- 1.2 Create a directory for your Node.js project and then switch to that directory by using the below commands:

```
mkdir github-api-demo
cd github-api-demo
```



```
File Edit View Search Terminal Help
root@ip-172-31-46-200:/# mkdir github-api-demo
root@ip-172-31-46-200:/# cd github-api-demo
root@ip-172-31-46-200:/github-api-demo#
```

1.3 Now, initialize the Node.js project by using the command **npm init**

```
File Edit View Search Terminal Help
root@ip-172-31-46-200:/# mkdir github-api-demo
root@ip-172-31-46-200:/# cd github-api-demo
root@ip-172-31-46-200:/github-api-demo# npm init -y
Wrote to /github-api-demo/package.json:

{
  "name": "github-api-demo",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}

root@ip-172-31-46-200:/github-api-demo#
```

Step 2: Install required packages

2.1 Install **Axios** package by using the command **npm install axios**

```
File Edit View Search Terminal Help
Wrote to /github-api-demo/package.json:

{
  "name": "github-api-demo",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}

root@ip-172-31-46-200:/github-api-demo# npm install axios
added 9 packages, and audited 10 packages in 790ms

1 package is looking for funding
  run `npm fund` for details

found 0 vulnerabilities

npm notice New major version of npm available! 8.1.4 -> 10.2.5
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.2.5
npm notice Run npm install -g npm@10.2.5 to update!
root@ip-172-31-46-200:/github-api-demo#
```

Step 3: Create a JavaScript script to fetch user data from GitHub

3.1 Inside the github-api-demo directory, create a file named as **index.js** by using the command **touch index.js**

```
File Edit View Search Terminal Help
root@ip-172-31-46-200:/home/prakharguptasim# touch index.js
root@ip-172-31-46-200:/home/prakharguptasim#
```

3.2 Open the file by using the command **vi index.js**

```
File Edit View Search Terminal Help
root@ip-172-31-46-200:/home/prakharguptasim# vi index.js
```

3.3 Now, paste the below code inside the file, and then save the file

```
const axios = require('axios');

async function getUser(username) {
  try {
    const response = await axios.get(`https://api.github.com/users/${username}`);
    console.log(response.data);
  } catch (error) {
    console.error(error);
  }
}

getUser('octocat'); // Replace 'octocat' with any GitHub usernam
```


Note: In the above code, replace **octocat** with your Github username

```
File Edit View Search Terminal Help
const axios = require('axios');

    async function getUser(username) {
      try {
        const response = await axios.get(`https://api.github.com/users/${username}`);
        console.log(response.data);
      } catch (error) {
        console.error(error);
      }
    }

    getUser('Simpli1234'); // Replace 'octocat' with any GitHub usernam
```

3.4 Now, run the **index.js** file by using the command **node index.js** to get a response



```
File Edit View Search Terminal Help
root@ip-172-31-46-200:/github-api-demo# node index.js
{
  login: 'prakhar117041',
  id: 62959691,
  node_id: 'MDQ6VXNlcjYyOTU5Njkx',
  avatar_url: 'https://avatars.githubusercontent.com/u/62959691?v=4',
  gravatar_id: '',
  url: 'https://api.github.com/users/prakhar117041',
  html_url: 'https://github.com/prakhar117041',
  followers_url: 'https://api.github.com/users/prakhar117041/followers',
  following_url: 'https://api.github.com/users/prakhar117041/following{/other_user}',
  gists_url: 'https://api.github.com/users/prakhar117041/gists{/gist_id}',
  starred_url: 'https://api.github.com/users/prakhar117041/starred{/owner}/{repo}',
  subscriptions_url: 'https://api.github.com/users/prakhar117041/subscriptions',
  organizations_url: 'https://api.github.com/users/prakhar117041/orgs',
  repos_url: 'https://api.github.com/users/prakhar117041/repos',
  events_url: 'https://api.github.com/users/prakhar117041/events{/privacy}',
  received_events_url: 'https://api.github.com/users/prakhar117041/received_events',
  type: 'User',
  site_admin: false,
  name: null,
  company: 'Simplilearn Solutions pvt. ltd.',
  blog: '',
  location: 'Varanasi, U.P., India',
  email: null,
  hireable: null,
  bio: null,
  twitter_username: null,
  public_repos: 1,
  public_gists: 0,
}
```

By following the above steps, you have successfully fetched user's data using the GitHub API.