Fetch Api Using Html and Javascript

,Dr.D.B.Kadam,Mohammadzaid Farque Bhati

Dept. of E&TC Engineering, Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Maharashtra, India

ABSTRACT: FetchApi is a Chrome web app for interacting with HTTP APIs. FetchApi allows user to automate test cases in javascript with salient features like write test suites, fetch requests that can contain dynamic parameters, pass data between requests, etc

Keywords: Html, Css, Codemirror , Axios , Bootstrap ,Pretty-Bytes ,Visual Studio Code

INTRODUCTION

- Fetch Api is an web based app which makes backend API(Application Programming Interface) requests and displays the result in json (Javascript Object Notation).It is an simple Graphic User Interface for sending and viewing HTTP(HyperText Transfer Protocol) requests and responses.This website has the ability to make various types of http requests like GET,POST,DELETE,PATCH,PUT.It also has functionalities to define the Query Params,Headers,JSON.It gives responses in Body section gives Header information.This Website has a program to give accurate status codes,Time taken to execute the Api and displays the size of data which is received

- For sending the request, you should have a URL that defines the API endpoint. All API operation is usually associated with an endpoint, which is a place from where these APIs can access the resources that are required to perform their task.

- **GET:** This HTTP method is used to retrieve data from an API.

- **POST:** To send the new data to an API, we can use this method.

- **DELETE:** This is used to remove or delete the existing data.

- **PATCH:** This method is used to update the existing data.

- **PUT:** This method is used to update the existing data.
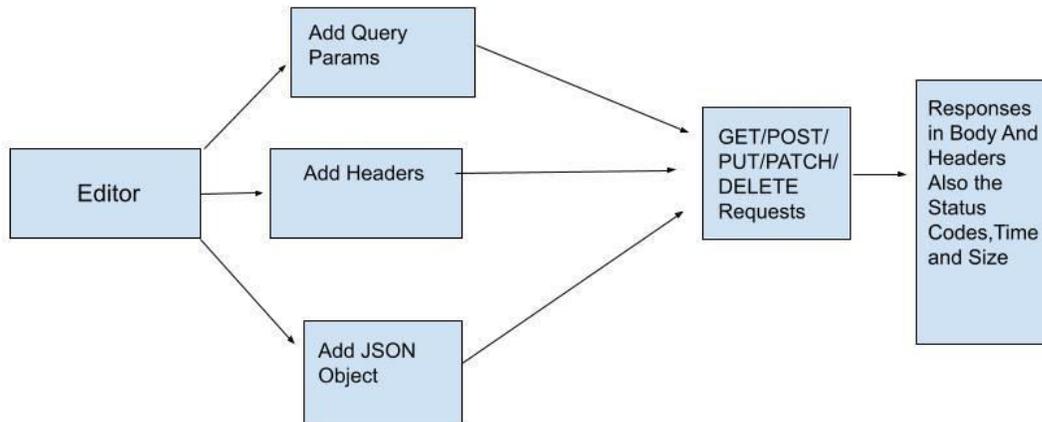
FUNCTION OF AN APP

Fig. 1: Block Diagram

This app consists of many files such as script.js,index.html,setupEditor.js,node_modules,packages.json.The main heart of the app runs by two files which is script.js,setupEditor.js others are files where the packages gets installed and the structure of app gets determined

- Script.js => Here the containers such as Header, Input Field and button styled with bootstrap are introduced.To make editor feel container Ui we have used Codemirror Library and its sub Library called Editor State,Basic Setup

- Codemirror => Codemirror is a versatile text editor implemented in JavaScript for the browser. It is specialized for editing code, and comes with over 100 language modes and various addons that implement more advanced editing functionality. Every language comes with fully-featured code and syntax highlighting to help with reading and editing complex code.

- Codemirror/Editor-State => It greatly improves the library's accessibility and touchscreen support, provides better content analysis and a modern programming interface. The new system matches the existing code in features and performance. It is not API-compatible with the old code.

- Index.html => This files contains the structure of app, all buttons and text fields classes are defined in this file.Also the it has an form that gets submitted through server whenever you click on send button

- Bootstrap => a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

Following are Features of Axios Library

- Make http requests from node.js
- Supports the Promise API
- Intercept request and response
- Transform request and response data
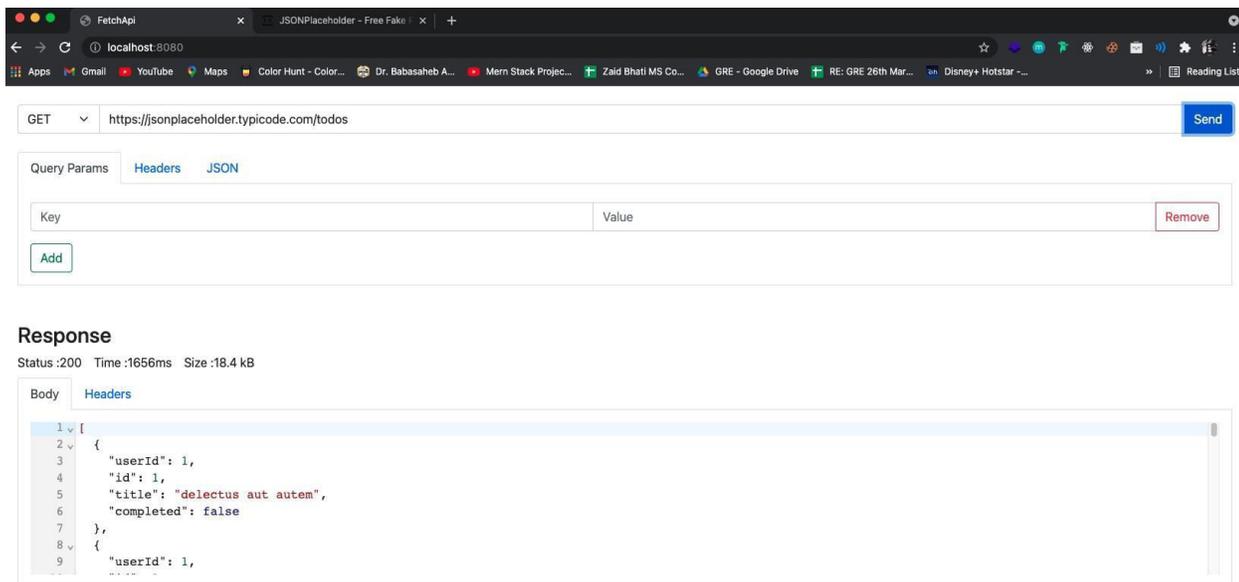- Cancel requests
- Automatic transforms for JSON data

Pretty-bytes Library => Used to calculate how many bytes data is sent or received.Useful for sizes in bytes which human can understand

When you will run the code in your local visual studio code ,the website will load and you will see a good ui and with input fields and other editor tabs.

SOFTWARE ,LANGUAGES AND FRAMEWORKS

- Visual Studio Code
- HTML
- CSS
- JAVASCRIPT
- NODE PACKAGE MANAGER (NPM)
- Codemirror
- Bootstrap
- Pretty-Bytes

OBTAINED RESULTS:
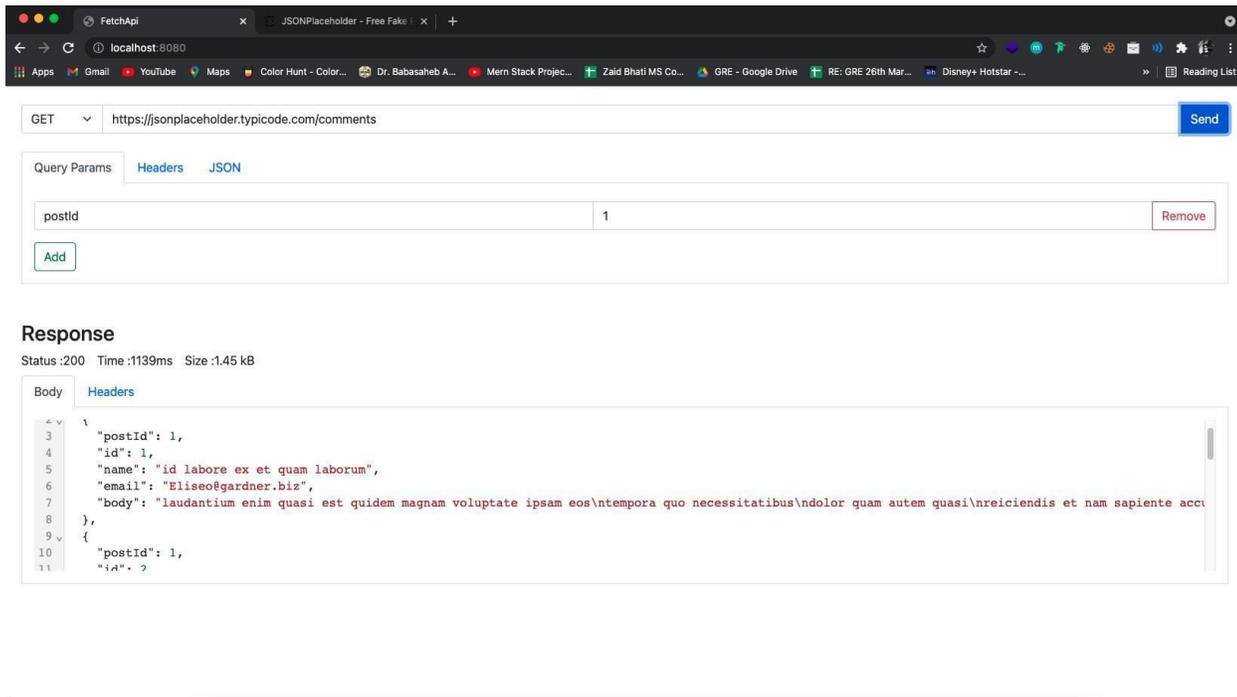
Fig. 1: Fetch Api App

Fig. 2:Adding Query and Fetching Results

CONCLUSION AND PERSPECTIVES

FetchApi allows users to build collections for their API-calls.It will help to organize the test suites.To test checkpoints, verification of successful HTTP response status shall be added to every API-calls.Tests can be performed in several repetitions or iterations by using the Collection Runner or Newman, which saves time for repeated tests.The design of multiple environments results in less replication of tests as one can use the same collection but for a different setting.

REFERENCES

[1]Elisabeth Freeman and Eric Freeman, "Head First HTML with CSS & XHTML", Publisher(s): O'Reilly Media, Inc., pub:1 December 2005.

[2] Douglas Crocford, "JavaScript: The Good Parts", Publisher(s): O'Reilly Media, Inc, pub:2008.

[3]Javascript ,The Definitive Guide by Flanagan, Seventh Edition.