Team Big Data

U-tification

DAR Report
JavaScript Ajax Library

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Team Leader: Joseph Armas

Team Members: Joshua Gherman

Rhoy Oviedo

Frank Curry

Ghabrille Ampo

David DeGirolamo

Git Repository: https://github.com/JosephArmas/cecs-491A-Team-Big-Data

Technologies:

1. SuperAgent
2. Fetch
3. Axios
4. Request

Metrics:

1. Data Input
2. Google Chrome
3. GET, POST, PUT, DELETE, HEAD
4. File Upload
5. Payload
6. Https

Introduction

In our application, It is very critical to communicate with a server to get and receive data, hence a JavaScript library is required to perform Ajax requests.

Technologies/Metrics	SuperAgent	Fetch	Axios	Request
Data Input (1.0x)	JSON [4]	JSON [4]	JSON [4]	JSON [4]
Google Chrome 102.0.5005.189 (1.2x)	True [4]	True [4]	True [4]	False [0]
GET, POST, PUT, DELETE, HEAD (1.2x)	True [4]	True [4]	True [4]	True [4]
File Upload (1.1x)	True [4]	True [4]	True [4]	True [4]
Payload (1.0x)	unlimited [4]	128 MB [2]	unlimited [4]	? [1]
Https	True	True	True	True

(1.2x)	[4]	[4]	[4]	[4]
Total	26.8	24.8	26.8	19

Valuation was determined 1-4 with 4 being the best option and 1 being the worst option for each metric. The weights were determined by how important they are to make our application work. The score each metric gets is inside of the brackets "[]".

Conclusion

In our application we're going to need to be able to perform Https request, GET, POST, PUT, DELETE, HEAD, File Upload will be required with the ability for users to upload pictures in .png or .jpeg that would stored on U-tification servers. Since our applications require to be operated on a chrome browser it knocks off the Request library. As a result, it boils down to SuperAgent, Fetch and Axios. Our application is required to support up to 50,000 pins and more than 100 images, therefore with a large head room in payload to perform a large data transaction and if needed, allowing multiple leading to SuperAgent or Axios, since they're both equal in the total of the metrics it does not matter which library we use and is just a matter of preference. In this case we're going to use Axios.

References

Axios
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https://zetcode.com/javascript/axios/
https://stackoverflow.com/questions/58655532/increasing-maxcontentlength-and-maxbodylength-in-axios
https://stackoverflow.com/questions/43013858/how-to-post-a-file-from-a-form-with-axios
https://axios-http.com/docs/req_config
https://blog.logrocket.com/understanding-axios-post-requests/

SuperAgent
https://www.npmjs.com/package/superagent

Request
https://www.javascriptstuff.com/ajax-libraries/
https://github.com/request/request#tlsssl-protocol

Fetch
https://stackoverflow.com/questions/51882961/increase-maximum-body-size-for-the-fetch-api-in-chrome
https://attacomsian.com/blog/uploading-files-using-fetch-api
https://gaya.pizza/articles/uploading-files-superagent-in-browser/