DAR Report

Hubba - Front-End Technology

Version 1.2

Prepared By: Development Hell

Class: CECS 491-04

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Github Repository:

https://github.com/DevelopmentHellaHell/SeniorProject

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Revision History

Version	Overview	Date
1.0	Initial DAR report	12/4/2022
1.1	Quantified attributes being compared and added further justification in conclusion	12/10/2022
1.2	Made metrics quantifiable	12/12/2022

Decision

The following options will be considered as the front-end framework or library used for the client's UI and UX development.

- 1. Angular version 14
 - a. TypeScript-based framework developed by Google
- 2. React version 18.2.0
 - a. JavaScript-based library developed by Meta
- 3. Vue.js version 3.2.45
 - a. JavaScript-based framework developed by Evan You and community members

<u>Analysis</u>

Metrics	Angular	React	Vue.js
Low memory usage for fast response time on page load (lower value is better)	282.8 kB	274.6 kB	196.5 kB
(x 1.0)	I	2	3
LTS and stability for future development of application (x 1.0)	Unsupported after 18 months	Legacy support for older features, maximum support of 6 years	Legacy support for older features, maximum support of 6 years
	1	2	2
Can be Used to Create a Single-Page	Yes with Angular CLI	Yes with React Router	Yes with Vue CLI
Application (x 1.3)	1	1	1
Able to Store Values Across Views (x 1.3)	Must create own service to receive event	Native support with props, allows all types with type checking	Native support with props, must declare prop type explicitly
Windows/Mac Compatible	Windows and Mac	Windows and Mac	Windows and Mac
(x 1.0)	1	1	1
TOTAL (highest number is better)	5.6	10.2	8.9

Recommendation

Based on the analysis, React is the best option given our project's needs. In case of any changes to React that would affect our implementation, Vue.js would be the second best option.

References

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- Raval, Nihar. "React vs Vue: Comparison of the Best JavaScript Frameworks at a Glance!" *React vs Vue*, Radixweb, 25 Aug. 2022, https://radixweb.com/blog/react-vs-vue.