

# DAR Report

## Hubba - Front-End Technology

Version 1.0

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

# 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

# Analysis

	Angular	React	Vue.js
Memory <sup>1</sup>	143 K 1	97.5 K 2	58.8 K 3
LTS and stability	Deprecation after 18 months, new release after 6 months 1	Legacy support for older features, maximum support of 6 years 2	Legacy support for older features, maximum support of 6 years 2
Document Object Model Responsiveness (values adjusted by 1.5x)	Real DOM - must check all portions of document for changes made 1.5	Virtual DOM - comparison of virtual DOM is made to real DOM before changes are applied 3	Virtual DOM - comparison of virtual DOM is made to real DOM before changes are applied 3
Scalability <sup>2</sup> (values adjusted by x1.5)	Framework includes native functionality for increasing functionality with its modular-based development structure 4.5	Component-based coding in javascript and third-party functionality allows newer features to be introduced or reused from older features 3	Template-based coding means it is difficult to recycle coding sections 1.5

<sup>1</sup> Memory information taken from [relevant.software.com](https://relevant.software.com)

<sup>2</sup> Template based coding information taken from [radixweb.com](https://radixweb.com)

Windows/Mac Compatible	Windows and Mac 1	Windows and Mac 1	Windows and Mac 1
Contributors and Community Size	1,500+ 2	1,500+ 2	400+ 1
Industry Presence <sup>3</sup> (values adjusted by x0.5)	72,747 listings 1	70,963 listings 1	11,590 listings 0.5
<b>TOTAL</b>	12	14	12

## Recommendation

As a result of the analysis performed above, we recommend moving forward using React JS as the library for front-end development of the application.

React edges out Vue in regards to scalability, performs better in responsiveness compared to Angular, and has a strong community support with long-term stability.

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<sup>3</sup> Information taken from zerotomastery.io

# References

Dziuba, Anna. Angular vs. React vs. Vue.js – Choosing a JavaScript Framework for Your Project in 2023, Relevant Software, 22 Nov. 2022, <https://relevant.software/blog/angular-vs-react-vs-vue-js-choosing-a-javascript-framework-for-your-project/>.

Neagoie, Andrei. “Tech Trends Showdown 🏆: React vs. Angular vs. Vue.” Zero To Mastery, 20 Dec. 2021, <https://zerotomastery.io/blog/tech-trends-showdown-react-vs-angular-vs-vue/>.

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>.