Front end framework research

CodexHub





Version table

Version	Date	Author(s)	Changes
1.0	April 2022	Florin Deleanu	First draft

Introduction

For this research report I will consider the most 3 popular front end Javascript frameworks: React, Angular and Vue. I will go briefly over the pro's and con's then give my personal opinion. I will consider their ease of use, popularity, flexibility as well as personal knowledge when making my choice.

Choice of technology

React

React is Javascript library used and developed by Facebook. It is easy to learn because of the simple syntax which is similar to Javascript. It is considered to be liked by 66.9% of developers that used it (Kumar). Being supported by Facebook, it is currently the most popular and in demand framework (JS_Cheerleader). The documentation is not as extensive as Angular but everyone can contribute to React with their own libraries giving it incredible diversity. This makes learning it more in depth possible through blog posts, articles, videos etc.

Angular

Angular is founded by Google and it ideal for large scale applications that are full of features. It is based on the structured MVC model and uses TypeScript instead of the usual Javascript. The drawback is that it has a steep learning curve and it is not as beginner friendly as the other discussed frameworks. It's liked rating is lower than of react, sitting at 51.7% (Kumar).

Viie

Vue is a Javascript framework launched in 2013. Although the market share of it is not as big as Angular or React, it is very adaptable so you can switch easily from React or Angular because of their design and architecture (Kuts). It provides great integration and building single-page applications similar to the others. It's syntax is more similar to plain Javascript and HTML making it one of the easier frameworks to learn if you already know that technology stack in depth beforehand.





Conclusion

For my individual project I chose React over the other 2 choices on the following criteria's. Firstly, I've worked with it before and front-end not being the main focus of this semester combined with the lot of learning materials available in many formats means faster development time.

Another incentive for choosing it was the fact that it is currently the most popular choice among the three with very good prospects for the future. Because all three frameworks are very popular, you can find many templates and libraries to speed up development time in all of them.

Lastly, my project team will use React so it is good to stay consistent and share ideas and best practices.

Bibliography

- Ict Research Methods. (n.d.). *The_DOT_Framework*. Retrieved from https://ictresearchmethods.nl/The_DOT_Framework
- JS_Cheerleader. (n.d.). Retrieved from https://medium.com/javascript-scene/top-javascript-frameworks-and-topics-to-learn-in-2020-and-the-new-decade-ced6e9d812f9
- Kumar, A. (n.d.). Retrieved from https://dzone.com/articles/react-vs-angular-vs-vuejs-a-complete-comparison-gu
- Kuts, R. (n.d.). Retrieved from https://blog.techmagic.co/reactjs-vs-angular-vs-vuejs-what-to-choose-in-2020/