

Research Document

JavaScript frameworks

Fontys University of Applied Science Software

Project Plan Individual project:



Henaknowledge

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Introduction

After understanding that the backend we are developing will be spring boot, we dove into how to create frontends to complete the picture of being a full stack developer. Thus, this research is going to show the main question of the research, the stages or the steps taken and a conclusion to sum everything up.

Research question

Main question: What is the library that facilitate creating frontends with Javascript programming language that would help me completing the project and allow me to find job easily?

Sub-questions: What are the famous JavaScript libraries for creating frontends? Which one of them deserve spending time and money on learning? Which of those libraries the job demand want the most?

DOT framework methods used:

- [Document analysis](#)

The required criteria for completion

- The library has to be in JavaScript
- The library has to have good percentage of employment
- The popularity of the library should be good enough

My personal criteria for library

- The learning curve should not be extremely difficult, steep or easy are acceptable ones.

Results of the research:

- In this research, I used different resources. I prefer to hear what people would say about the most popular frameworks in videos, but reading about it is also fine and prefer reading if I have to get to know more and more about the subject. Therefore, I used YouTube and websites as main information sources in this research.

Step 1:

- I began the research by checking out the canvas links regarding the available JavaScript frameworks. I figured out that they are 3 popular framework out there:
 - Angler
 - React
 - Vue.
- Afterwards, I asked for recommendations from my individual track teachers and came to a conclusion that from a developer perspective the easiest framework to work with is Vue.
- I surfed the website to get to more about Vue here are the findings I managed to conclude:
 - Vue is very famous but does not have a big company to support it and its technology is liked by so many developers and perhaps is the most liked frontend library.
 - Vue has a very low chance of employment. In other words, learning Vue might not benefit me in the future if I had to work as a frontend developer in a project.
 - Vue considered to be the easiest in learning curve because it has some syntax that is similar to what backend developer used to see. In other words, more intuitive.

Ref. (Neagoie, 2018)

DOT framework methods used:

- [Document analysis](#)

Step 2:

- I was leaning more towards Vue until I asked my peers about their opinions regarding the frameworks. In addition, I was also working in different project where I had to use React as frontend. My peers all agreed that react probably is the most suitable one to choose and it would make sense to choose as I would not need to learn 2 different JavaScript frameworks at the same time for different projects.
- Therefore I decided to continue the research and find out more and more about React. Here are the results I got:
 - React is not as easy as Vue, but it has intuitive syntax called AJAX, which is more less like a syntactical sugar to HTML with tags.
 - React has acceptable chance of employment. In other words, spending time and resources on learning React actually worth.
 - React is a very popular library that was developed and maintained by Facebook.

(Neagoie, 2018)

- At this point, I was convinced that React is going to be the JavaScript library I will be choosing for Henaknowledge project. Next, I continued researching more to get to know a little bit more about the last option left Angular.
- Here is the findings:
 - Angular considered to be the hardest due to Typed Script being something new for most backend developers.
 - Angular has a pretty decent employment chance.
 - Angular was created and maintained by Google

1. Table of comparisons

| | Angular | React | Vue |
|----------------|---|---|--|
| Learning Curve | Considered harder | Has an easier learning curve than Angular. It uses Ajax that looks like HTML to make things a bit more intuitive. | Considered to be the easiest learning curve |
| Job Chances | About 50% of the front-end jobs require Angular | About 48% of the front-end jobs require React | Very low percentage of job chances |
| Popularity | Well-known, made by Google, was the oldest. | Very famous, made by Facebook and was developed 3 years after Angular came out. | Very famous but does not have a big company to support it and its technology liked by many developers. |

DOT framework methods used:

- [Document analysis](#)

Conclusion

I figured out the most famous JavaScript frameworks out there and key characteristics for each framework. I chose the framework based on the criteria mentioned in the beginning of the research document. Thus, I decided to choose ReactJS as the framework I would use to create the frontend because of the decent employment chance I get in the feature after learning it and it made sense to work in the framework I have to use for other projects I work on.

All references

angular vs react vs vue | npm trends. (n.d.). Comparsion.

<https://www.npmtrends.com/angular-vs-react-vs-vue>

Clever Programmer. (2020, August 9). *The BEST JavaScript Framework for Web Development in 2020.*


YouTube. <https://www.youtube.com/watch?v=wURF45fj2fA>

Comparison with Other Frameworks â€” Vue.js. (2021).

Vue. <https://vuejs.org/v2/guide/comparison.html>

Star history. (n.d.). Stars.

<https://star-history.t9t.io/#facebook/react&vuejs/vue&angular/angular>

Tech trends showdown : React vs angular vs vue. (n.d.). Frameworks.

<https://zerotomastery.io/blog/tech-trends-showdown-react-vs-angular-vs-vue/>