

Technology Justification

Group 25

React.js

In our project only 8 weeks are remaining to complete the whole project. That is why we decided to Use mern and To achieve smoother, easier, faster development and deliver a quality output. Then we choose React JavaScript framework for frontend because, React is easy to learn and it doesn't take much time to learn this technology, we can quickly begin to build things with it. And it comes with useful development toolset

As a career fair system we need to build rich user-interfaces. React lets you build rich user-interfaces easily by its,

1. Reusable Components
2. Easy State Management
3. Better Ecosystem and Active Community

We need to build this system as a single page application. Which avoids loading new pages with each action and makes a better streamlined user experience. React js is one of the best framework for SPA.

Node.js

Using Node.js as our server technology makes our team more comfortable by using the same language on both the front end and the back end.

We are hoping to develop this system to give video conference features, then node.js is the best choice for applications that have to process a high volume of short messages requiring low latency.

In the period of career fair there will be more requests in the system then node.js will be the right choice because of node's ability to process many requests with low response time for these reasons, nodejs is a popular choice among single page applications.

Requirements may change in future. NodaJs has a scalability attribute so, as a solution we use node.js.

Express.js

We choose Express.js as our backend because then we only need to learn one language for both frontend and backend development, which is JavaScript.

We have a lack of time in this project, by using Express.js we would be able to debug our application faster with the help of the debugging mechanism it offers to its users. This helps to find error points easily without taking much time.

We have to ensure the safety of private data of companies and candidates such as email, phone numbers, etc. ExpressJS allows us to build secure and very fast software with JavaScript on the server-side by giving JavaScript newfound back-end functionality.

MongoDB

MongoDb uses JavaScript which is the same language we used throughout the Mern framework.

We have identified that the relations of our system are not complex. So using MongoDB is one of most suitable options.

Want to share data easily in our system so in MongoDB data stored in Json

1. Objects, Object Members, Arrays, Values and Strings
2. JSON syntax is very easy to use.
3. JSON has a wide range of browser compatibility.
4. JSON has a flexible and dynamic schema, so adding fields or leaving a field out is no problem.

Flexible Document Model – MongoDB supports document-model (tables, schemas, columns & SQL) which is faster and easier. In the future, if we want to give a video conference feature this flexibility would be really helpful for us.

We need to ensure database security and MongoDB provides various features, such as authentication, access control, encryption, to secure our database.

GitHub

- We can track changes in our code across versions.
- We can work in the same repository
- GitHub is secured storage that we can store our project

Trello

- Trello provides its core features for free.
- It keeps the project organised and focused.
- We can set due dates for essential tasks.
- We can keep our project files together.
- More familiar than other tools.