

Our first option for the technology stack included Node, React, and Firebase. To create our user interface, we decided to use React. First, as a team, we were most familiar with React as our front end and felt most comfortable using it for this project. We were considering some other alternatives such as Angular or Vue but ultimately decided against using these technologies because React offers superior speed, flexibility, and performance. Vue is mainly targeted toward the development of single-page applications and UI's, and because our project involves multiple different pages, React was a better option. React is also very flexible, and has great performance. It is also very efficient and it has reusable components.

We used Firebase because it really simplifies and abstracts our backend, making development easier given the timeframe. As a team, we considered a whole flurry of backend services like MongoDB as part of the MERN stack but found that the overhead of setting up our own collection in addition to the learning curve associated with MongoDB and Express.js was too much. Additionally, Firebase allows us to deploy our application, further simplifying the development process as we don't need to incorporate tools such as Heroku into the application. Firebase also provides more accessibility to APIs which is a great fit for our application. Also, many mobile web apps use Firebase since the development process is faster and the performance is better as well.