

## Technology Stack of Project

The group has considered several models for web applications, but we decided to pursue a more direct and simple way.



Router is a simple web app, and the MEAN stack is very convenient and neat to learn if we want to engage more in JavaScript/ TypeScript development.

It has an advantage of being very smooth and therefore aids the development. Moreover, in the classroom, professor Donham covers extensively about these frameworks and libraries.

1. Database: MongoDB was chosen for its simplicity and because the team does not have much experience in SQL. Mongoose was used for modeling and MongoJS was sometimes used for its similarity in Syntax with the MongoDB terminal.
2. Back-end framework: Express is known for its extensive support. Also, since it is the de facto default framework for Node.js, it is beneficial to learn the tools. More and more developers choose to bypass Python, Ruby and PHP for back-end development these days, so it would be interesting to learn how to do that. For the project, Express and Node were used for server and routing. API calls were solely managed by the backend. There was a learning curve for JavaScript but overall we seemed to have conquer it.
3. Front-end: Google invested a lot of money in making Angular a preferable framework. The group was considering between Angular 5 (CLI) and AngularJS, and decided to proceed if Angular 5 because it is more updated and TypeScript is a neater, more cleaned up version of JavaScript.