For this project we decided to utilize Node.js, with the express framework for the backend, MongoDB for the database, and React javascript for the library on the front end, which will be integrated in future iterations of the prototype.

In constructing the technology stack, the primary decision was selecting the framework for our backend. We were initially thinking between two technology stacks:

* Stack 1: Node.js + Express + MongoDB + React.js
* Stack 2: Node.js + Angular + MongoDB + React.js

We decided to use the express framework (Stack 1) because it was firstly, easy to learn. This was our main concern due to the limited timeframe and our own levels of experience. This stack framework was end-to-end continuous with javascript, which is the language most of our team members were familiar with. Additionally, there is a large selection of libraries/packages, allowing for cleaner API use and easy debugging. We also found that express was relatively fast, at least in comparison to Python.

We decided *not* to use Angular (Stack 2) because Angular is considered to have a steep learning curve which would dominate most of the time we spent on the project. We decided that our time should be scheduled to focus on other aspects such as brainstorming idea and  implementing APIs/libraries rather than familiarizing ourselves with a framework none of us had much experience in. We also figured that learning Angular wouldn’t be worth the time for a classroom project of this caliber, and that ease of implementation should be one of our main priorities. Furthermore, Angular had relatively worse search optimization that our stack 1.

For these reasons, we decided on the Express framework for our technology stack.