Assignment 3

1. <https://github.com/Corrigeux/Software-Design-4353-Group-17/tree/main/Assignment3>
2. For the front-end, we are using HTML, CSS, and EJS. EJS is a templating engine that can be used with HTML and CSS to render information from the back-end to the front-end very quickly. We are using NodeJS for the backend, but it also supports the front-end EJS. For the back-end, we are using ExpressJS, NodeJS, MongoDB, PassportJS, Express Sessions, and BcryptJS. BcryptJS is used for encrypting the passwords and PassportJS is used for authenticating users and for sessions. Express Sessions enables sessions, and MongoDB is the database we will be using to save data and pull data from. The back-end is fast and easy to extend because of flexibility of the ExpressJS routing feature. The data is quickly rendered onto the front-end from the back-end from the server side. From the front-end we make requests to the back-end to save the data through HTML forms using HTTP POST. For the price module we will be using the back-end to calculate the prices and store the client quote history information and then show the data in the front end through EJS. This technology is easy for other teams to get used to, and other features can be added on because of the NodeJS environment.
3. For our unit testing, we mostly focused on making sure our functions such as checking for information validation is covered. Most of the validation is done within the API calls when we pass information to our POST routes. For these information validation functions we worked on tests to see whether they are covered. The App is a little hard to test because we are already doing validations when the user submits information to the server, but it we are doing unit tests using JestJS for our functions too.
4. We all equally contributed to the assignment. Caleb mainly focused on updating the front-end so that we can access the data through requests. Mike and Tarun worked on the back-end parts of login, registration, client-profile management, and more.