1: Introduction to NodeJS

The software development course first started with the focus on MongoDB, NodeJS ExpressJS, Angular, and the MEAN-Stack. The course first introduced us to the NodeJS along with its features and design where I was able to learn the process of installing it and create a web server to use. npm, which stands for node package manager, was also installed to manage different packages. Then, the differences between NodeJS and PHP (other server-side technologies) were also discussed.

2: MongoDB

The second lecture focused on MongoDB, which is a popular database ‘NoSQL’, which is used to store data in a format of document orientation. The advantages and disadvantages of MongoDB’s usage and the way to install it were also discussed. The operations of CRUD (create, read, update, delete) were also discussed as of how they are performed using MongoDB shell. We also learned the way to connect a MongoDB database from NodeJS. I guess I cannot wait to start building applications with MongoDB because it is really user friendly and easy to use.

3: ExpressJS

The third lecture focused on ExpressJS, which is a framework web application for the NodeJS. We first learned the basics of templating engines, routing, in addition to middleware. I was also able to learn the creation of a simple web application using ExpressJS. Also, I was able to know the way for handling different requests of HTTP including GET, PUT, and POST. The function of middleware in ExpressJS and the way it can be used ti add different functions to the application was also discussed. Overall, I think it was a great lecture where I learned a lot and I feel now that I more confident in creating different web applications.

4: Angular

The fourth lecture focused on Angular, which is a popular front-end framework, that is used for the purpose of building web applications that are dynamic. We discussed the basics of Angular, including all the possible usage of different templates, services, modules, and components. I was also able to learn the way in which I can create a simple application of Angular and the possibility to use CLI for generating modules, components, and services. The observables’ role in Angular were also discussed and how they be utilized in order to handle data that is asynchronous. Overall, learning about Angular was exciting and I am looking forward to build different complex applications

5: MEAN-Stack

The fifth lecture focused about the MEAN-Stack, which is a full-stack JavaScript solution, that is used for building web applications also. The integration of NodeJS, MongoDB, ExpressJS, and Angular in order to create a scalable and powerful application. I was also able to learn how we can use Mongoose, which is ODM ‘Object Data Modelling’ library for MongoDB, for creating models for the data we have. We have discussed that its important to modularize our application. The usage of Angular services and modules were also discussed in order to create components that are reusable. Overall, it was a great learning experience and I feel confident that I will be able to build complex web applications using MEAN-Stack.