**Session 3**

This session is designed to building a web app using MEAN Stack. By completing this session, you will gain a basic understanding of the MEAN stack including building a REST interface with Express.js on top of Node.js and using that interface to perform CRUD operations on a database via AngularJS frontend.

MEAN is a complete JavaScript based technology stack used to develop web applications. MEAN Stack refers to MongoDB, Express, Angularjs & Node js. These set of technologies work well with each other and using these we can build an entire web application from Database to UI using only JavaScript.

In this tutorial we will build a simple Mittens Chat app with MEAN. This app will display a list of meows i.e. chat and will basically allow us to perform CRUD operations on them.

Introduction

**MongoDB**

MongoDB is a documented oriented database, with high performance and easy scalability, it works well with programming languages and reduces the need for JOINS.

**NodeJS**

NodeJS is a platform built on Chrome’s JavaScript runtime. NodeJS is used for server side scripting and uses JavaScript. This allows you to code server scripts in pure JavaScript. NodeJS is event driven and has a non-blocking I/O model.

**Express**

Express is fast, un-opinionated, minimalist web framework for Node.js. It helps organize you web-application into an MVC model architecture. We will use express to build REST APIs.

**AngularJS**

Angular, originally created and maintained by Google, runs your JavaScript code within the user's web browsers to implement a reactive user interface (UI). A reactive UI gives the user immediate feedback as they give their input (in contrast to static web forms where you enter all of your data, hit "Submit" and wait.

App features

The demo app that we will build for this session will have the following features

1. Add new meows.
2. Display all meows.
3. Delete existing meows.
4. Add Users.
5. Sign in and Signup functionality.

The back-end application should be run in the same way as in Session 1 & 2.

In this session you are going to learn following things:

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| --- | --- | --- | --- |
| S No | Recipe Name | Duration(in minutes) | Details |
| **Requirement1** | | | |
| 1 | **Recipe 1:**  Serving a Static Folder | 2-5 | Serving a Static Folder from a NodeJS ExpressJS Server |
| 2 | **Recipe 2:** Display meows | 10-15 | Display meows from mongo dB using GET api |
| 3 | **Recipe 3:**  Insert Meows | 10-15 | Insert Meows through application. |
| 4 | **Recipe 3:**  Delete Meows | 10-15 | Delete Meows through application. |
| **Requirement2** | | | |
| **Sign in and Signup functionality** | | | |
| 5 | **Recipe 5:** Signup Page | 5-10 | Front-End Routing for Making a Signup Page + Storing Users in DB. |
| 6 | **Recipe 6:** Password Encryption | 10-15 | Encrypt Passwords with bcryptjs and Make a Login Route. |
| 7 | **Recipe 7:** Cookies | 10-15 | Login and Save a JSON Web Token in a Cookie. |
| 8 | **Recipe 8:** Authorization | 25-30 | Showing the Author of the Meows + Only Letting You Delete Your Own. |