

8. Recipe Sharing Platform

Creating a Recipe Sharing platform using the MEAN stack (MongoDB, Express.js, Angular, Node.js) is a great project. Here's a high-level overview of how to get started and some code snippets to guide you:

Project Setup and Structure

Set up a new project folder and structure for your Recipe Sharing platform. Install the required Node.js packages and create a basic Angular application.

Create a new Angular application

```
ng new recipe-sharing
```

- Backend (Node.js & Express.js)

Create the backend of your Recipe Sharing platform using Node.js and Express.js.

Installation of Packages

Install the necessary packages for Express.js, Mongoose, and other dependencies.

```
npm install express mongoose cors
```

Setting up Express.js

Create your Express.js server, set up middleware, and handle routes.

- javascript

// server.js

```
const express = require('express');  
const mongoose = require('mongoose');  
const cors = require('cors');
```

```
const app = express();
```

// Middleware

```
app.use(express.json());  
app.use(cors());
```

// Database connection

```
mongoose.connect('mongodb://localhost/recipe-sharing', {  
  useNewUrlParser: true,  
  useUnifiedTopology: true,  
  useCreateIndex: true,  
});
```

// Routes

```
app.use('/api/recipes', require('./routes/recipes'));
```

```
const port = process.env.PORT || 3000;
```

```
app.listen(port, () => {
```

```
  console.log(`Server is running on port ${port}`);
```

```
});
```

Define Schemas and Models

Create Mongoose schemas and models for recipes. These models will define how data is structured and stored in MongoDB.

- javascript

// models/Recipe.js

```
const mongoose = require('mongoose');
```

```
const recipeSchema = new mongoose.Schema({
```

```
  title: String,
```

```
  description: String,
```

```
  ingredients: [String],
```

```
  directions: [String],
```

```
author: String,
```

```
// Add more fields as needed
```

```
});
```

```
module.exports = mongoose.model('Recipe', recipeSchema);
```

Routes

Define routes for CRUD operations on recipes, including create, read, update, and delete.

javascript

```
// routes/recipes.js
```

```
const express = require('express');
```

```
const router = express.Router();
```

```
const Recipe = require('../models/Recipe');
```

```
// Create a new recipe
```

```
router.post('/create', (req, res) => {
```

```
// Validate user authentication (if required)
```

```
// Save the recipe to the database
```

```
// Return success response
```

```
});
```

// Create similar routes for other operations (read, update, delete)

- Frontend (Angular)

Create the frontend of your Recipe Sharing platform using Angular. Design the user interface and implement recipe sharing and search features.

Design and UI

Design the user interface for your Recipe Sharing platform using Angular components, templates, and styles.

Recipe Sharing

Create components and forms for users to share their recipes, including title, description, ingredients, and directions.

- typescript

// recipe-share.component.ts

```
import { Component } from '@angular/core';  
import { RecipeService } from '../recipe.service';
```

```
@Component({
```

```
    selector: 'app-recipe-share',
    templateUrl: './recipe-share.component.html',
  })

export class RecipeShareComponent {

  title: string;

  description: string;

  ingredients: string[];

  directions: string[];


  constructor(private recipeService: RecipeService) {}


  shareRecipe() {

    this.recipeService.shareRecipe(this.title, this.description,
    this.ingredients, this.directions);

  }

}
```

Recipe Search

Implement components for recipe search functionality, allowing users to search and filter recipes.

MongoDB

Create a MongoDB database to store recipe data.

Authentication (Optional)

Consider implementing user authentication if you want to track and manage user-contributed recipes.

Putting It All Together

Integrate the frontend and backend by making API requests from Angular components to Node.js routes. Ensure that you handle recipe sharing and searching properly.

Building a Recipe Sharing platform is a rewarding project. As you progress, you can consider adding features like user accounts, ratings, comments, and image uploads to enhance the platform's functionality and user experience.