**Section: Backend Folder Structure & Description**

**Root Folder: backend**

This directory contains all server-side logic, including the database configuration, API endpoints, data models, and initial data.

**Folder & File Overview:**

**1. models/**

Contains Mongoose or Prisma models (depending on database used). These define schemas for key data types like users, messages, and matches.

**2. routes/**

Defines all API routes. It connects client requests to corresponding controller logic. Example routes include:

* /api/users
* /api/matches
* /api/messages

**3. node\_modules/**

Dependency folder generated by npm install. Not modified manually.

**4. package.json**

Defines backend project metadata, scripts, and dependencies like Express, Mongoose, bcrypt, etc.

**5. package-lock.json**

Specifies exact versions of dependencies to ensure consistent installations.

**6. seedData.js**

Script to populate the database with initial sample data. Useful for development and testing.

**7. server.js**

Main entry point of the backend server. Sets up the Express app, middleware, routes, and MongoDB connection.

**API Flow Example:**

Frontend Request → Routes → Controller → Model/DB → Response Sent

**Technologies Used:**

* **Node.js + Express.js**: Core backend framework
* **MongoDB/Mongoose**: Database & object modeling
* **CORS, dotenv, body-parser**: Middleware and utilities
* **bcrypt**: Password hashing (likely used in auth)
* **JWT**: For authentication tokens (if implemented)

**Summary:**

The backend folder acts as the backend engine of the MatchMate app, handling authentication, user data, matches, and real-time logic. It connects directly to the MongoDB database and exposes secure RESTful APIs to the frontend.