CRUD Application using MongoDB and Mongoose

Project Title:- Booking Management System — Full Stack CRUD Application

Objective:- To develop a full-stack web application that demonstrates complete Create, Read, Update, and Delete (CRUD) operations using MongoDB as the database, Mongoose as the ODM, Express.js for backend API, and a simple frontend interface using HTML, CSS, and JavaScript.

Technology Stack:-

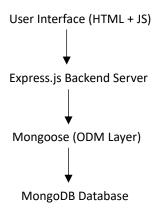
Layer	Technology
Backend	Node.js + Express.js
Database	MongoDB (via Mongoose ORM)
Frontend	HTML, CSS, JavaScript

Features Implemented:-

API Architecture RESTful API

Operation	Functionality
Create	Create new bookings via form submission
Read (All)	Fetch and display all bookings in history
Read (By ID)	Fetch individual booking by ID when editing
Update	Update existing bookings
Delete	Delete existing bookings

System Architecture Flow:



- User Interaction: Submit forms, edit and delete bookings from the frontend interface.
- Backend Server: Handles API requests via Express.js.
- Mongoose Layer: Maps JavaScript objects to MongoDB documents.
- Database: Stores all booking data.

Conclusion:-

This project fully demonstrates a complete CRUD system integrated across frontend, backend, and database layers, satisfying the project requirement of developing a simple CRUD application using MongoDB and Mongoose.