Name: Muhammad Abdul Qadir

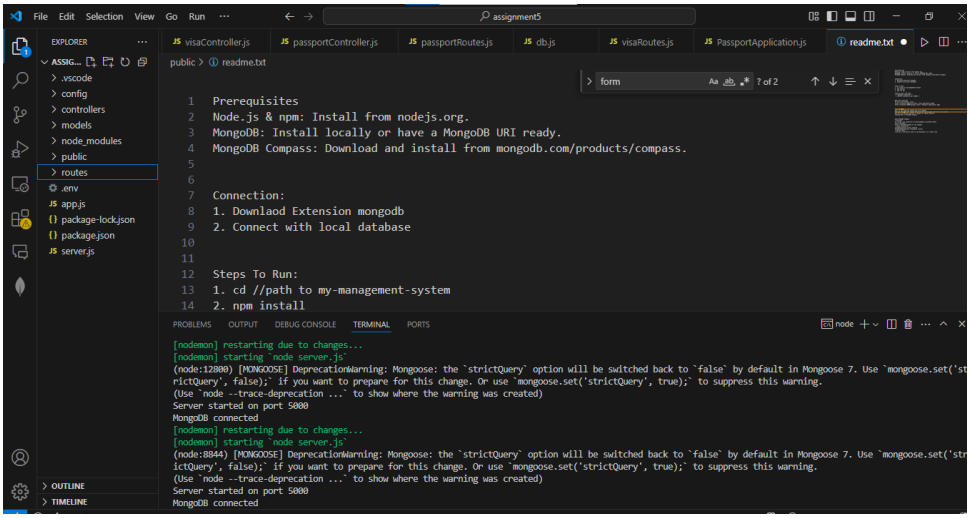
Project:

Digital Visa and Passport Processing System using Node.js, Express.js, and MongoDB

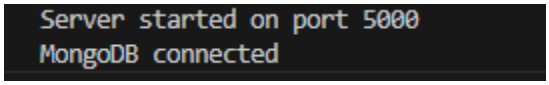
Setup And Connection

All Steps For Connection and Prerequisites are defined in the readme file in the zip file and

This Report will Be consist of all the Screenshots of Working functionalities

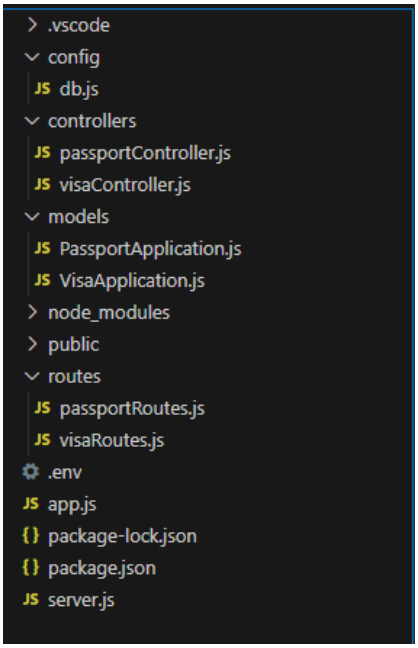


1)Connection



2)Structure

Key Components:



1. .vscode/
    - VSCode workspace/config files (editor-specific settings).
2. config/
    - Contains db.js which sets up database connections (e.g., MongoDB).
3. controllers/
    - passportController.js & visaController.js: Handle business logic for passport/visa routes (e.g., CRUD operations).
4. models/
    - PassportApplication.js & VisaApplication.js: Define Mongoose schemas for database collections.
5. routes/
    - passportRoutes.js & visaRoutes.js: Define API endpoints (e.g., /api/passport) and map them to controllers.
6. public/
    - My Actual Front End Website (Html, CSS and Javascript)

Root Files:

- .env: A secret note file that stores important settings (like where the database is, or which port to use).
- app.js: The "brain" of the app—sets up rules, connects parts, and tells the app how to work.
- server.js: Starts the app—like pressing the "ON" button for the app to run.
- package.json **&** package-lock.json: A list of all the tools and libraries the app needs to work.

Key Features

1. **Modular Design**:
    - The app is split into **small, focused parts**:
        - *Controllers*: Handle tasks (like adding or deleting data).
        - *Models*: Define how data is stored (like a blueprint for a database).
        - *Routes*: Decide which URLs trigger which actions (like /login or /signup).
2. **Database Integration**:
    - Uses **Mongoose** (in the models/ folder) to talk to a database (MongoDB). Think of it as a translator that helps the app save and fetch data neatly.

To Run:

Prerequisites

1)Node.js and npm installed

2)A MongoDB URI (from MongoDB Atlas or a local instance)

3)MongoDB Compass installed

Steps To Run:

1) cd /path/to/your/project in cmd

2) run-->npm install

3) Install Mongodb Extension and connect to the local Database

4) Also open Mongodb Compass with the same connection details

5) run-->npm run dev

Terminal:

Server started on port 5000

MongoDB connected

Next Step:

then run these forms and check the output in the Wesite as the visa and passport applications are shown there ass well and in MongoDB Compass Database

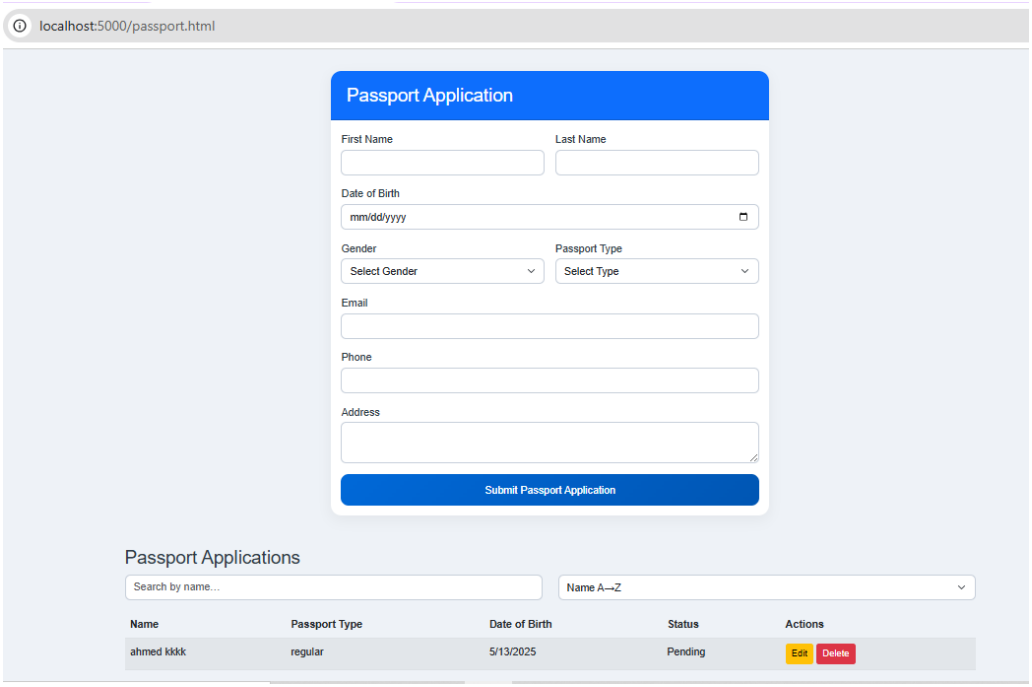
Links:

Passport Form--> http://localhost:5000/passport.html

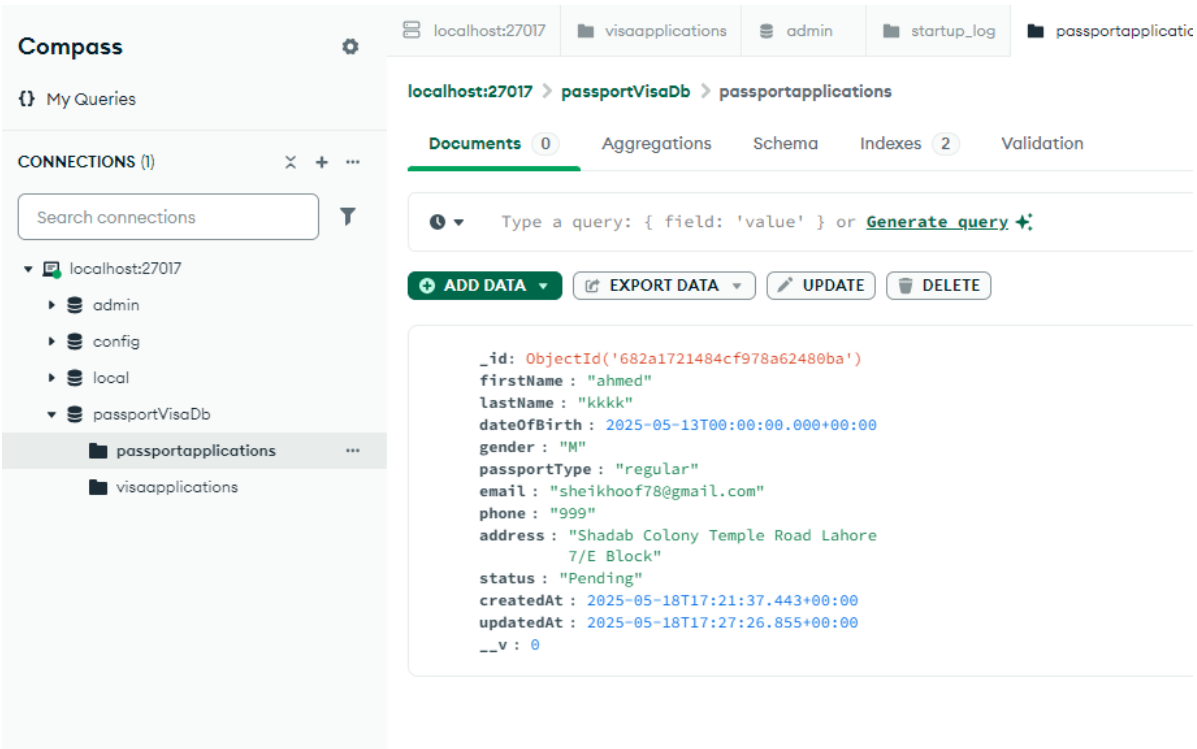
Visa Form--> http://localhost:5000/visa.html

Output Screenshots:

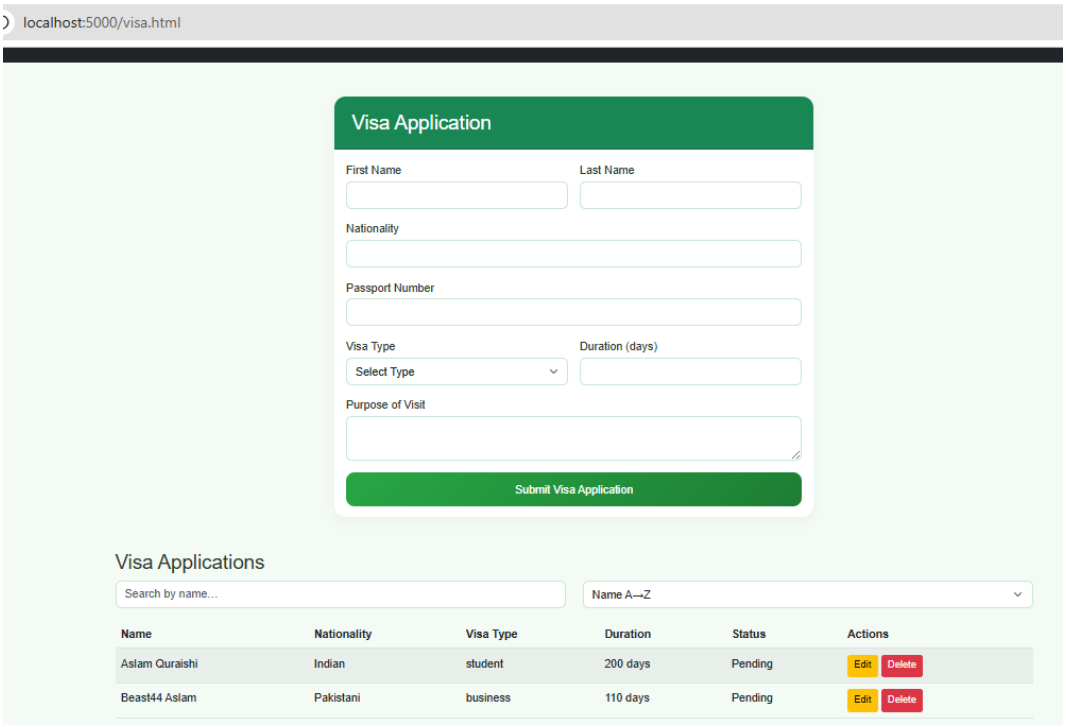
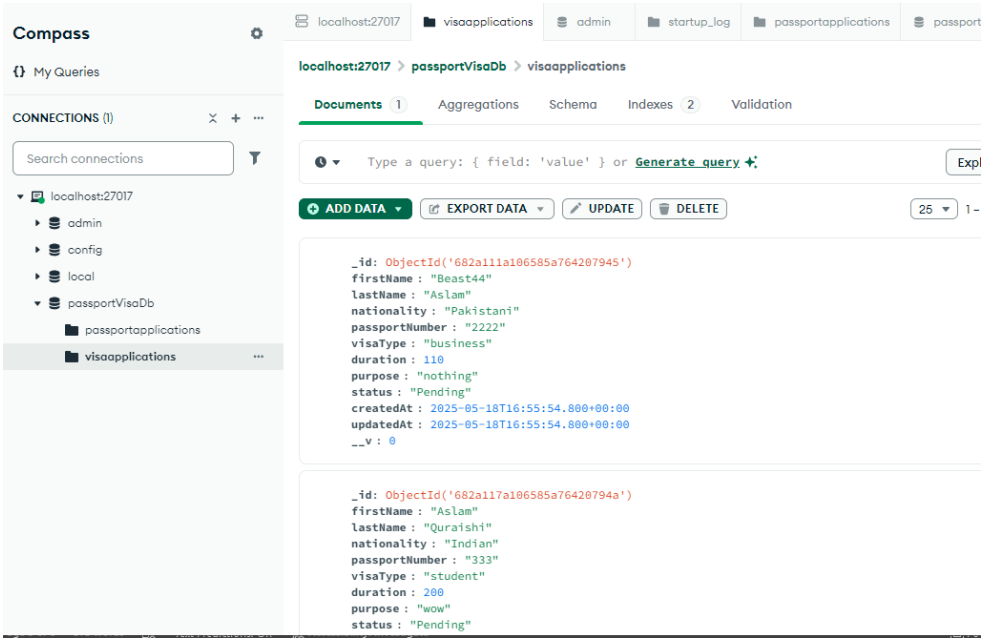
Passport Form



MongoDB Database



Visa Form



Mongo DB Database