DATABASE SCHEMA (MONGODB)

PROJECT – SMART CITY MANAGEMENT - 2025

USERS - STORES REGISTERED USERS (ADMIN CITIZEN)
Users

{

- _id: ObjectId,

- name: String,

- email: String (unique),

- password: String (hashed),

- role: String ("user" | "admin"),

- contactNo: String,

- createdAt: Date,

- updatedAt: Date

}

EnergyData

Stores real-time energy usage logs.

EnergyData

{

➢ _id: ObjectId,

➢ sector: String,

➢ usage: Number,

➢ status: String ("Normal" | "High Load" |

  "Critical"),

➢ createdAt: Date

}

AirDataStores real-time air quality index (AQI) data.

AirData

{

- ➤ _id: ObjectId,

- ➤ location: String,

- ➤ AQI: Number,

- ➤ pollutantType: String, // e.g., PM2.5, PM10, CO2

- ➤ status: String ("Good" | "Moderate" | "Unhealthy" | "Hazardous"),

- ➤ createdAt: Date

}

ComplaintsStores citizen complaints from the Contact page.

Complaints
{

- _id: ObjectId,

- name: String,

- age: Number,

- contactNo: String,

- email: String, address: { houseNo: String,

- street: String, cityRegion: String ("Gomti Nagar" | "Hazratganj" | "Kaiserbagh") },

- problemType: String

- ("Water" | "Electricity" | "Waste" | "Other"), customProblem: String,

// only if "Other" description: String,

// explanation of problem

- suggestion: String, status: String ("Pending" | "In Progress" | "Resolved"),

- createdAt: Date

}

ChatbotLogsStores chat history and bot interactions.

ChatbotLogs
{

➤ _id: ObjectId,

➤ userId: ObjectId (ref -> Users),

➤ query: String,

➤ response: String,

➤ suggestions: [String],

➤ createdAt: Date

}

THANKS

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