Documentation for MinistryHealthDB

Overview

MinistryHealthDB is a relational database designed to manage and organize data for a government health system. The project provides a structured approach to handling information about health ministries, ministers, secretaries, administrative personnel, public health officials, and more. It also incorporates data related to various departments such as Ayurvedic, Drug, and Curative departments, ensuring an extensive coverage of the healthcare system's structure.

Project Features

1. Centralized Health Data Management

o Organizes hierarchical information from ministries to administrative levels.

2. Interconnected Tables

o Implements relational constraints for data integrity using foreign keys.

3. Comprehensive Entity Coverage

 Includes entities such as ministries, secretaries, public health departments, and international aid teams.

4. Sample Data for Demonstration

o Provides sample data to illustrate database functionality and relationships.

5. Scalable Design

o Allows easy extensions for additional departments or entities as needed.

Database Schema

Key Tables

1. Ministry health

- o Stores information about the ministry and its officials.
- o Example columns: Id, name, position.

2. minister

- Details about ministers and their roles.
- o Example columns: minister id, minister name, position, health ministry id.

3. secretary

- o Information about secretaries linked to ministers.
- o Example columns: secretary id, secretary name, position, minister id.

4. department_health

- o Manages department-specific roles and officials.
- o Example columns: id, name, position, secretary id.

5. public health

- o Data on public health officers and assistants.
- o Example columns: id, name, position, secretary id.

6. ayurvedic, drug department, curative

- o Specialized departments with roles specific to their domain.
- o Example columns: id, name, position, secretary id.

Entity-Relationship Diagram (ERD)

Refer to the file: Government Health System EER Diagram.pdf

• Visualizes table relationships and primary/foreign key constraints.

Setup Instructions

Pre-requisites

- A relational database system (MySQL recommended).
- SQL client or terminal for executing scripts.

Steps to Set Up

- 1. Clone the repository:
- 2. git clone https://github.com/<your-username>/MinistryHealthDB.git
- 3. Navigate to the repository directory:
- 4. cd MinistryHealthDB
- 5. Open the Code.sql file in your SQL client.
- 6. Execute the script to create the database and populate sample data.

Usage

Executing Queries

- 1. Use the provided database schema to execute queries and extract specific information.
- 2. Modify the Code.sql script to test custom scenarios or add new entities.

Sample Queries

- Fetch all ministers:
- SELECT * FROM minister;
- Find all secretaries working under a specific minister:
- SELECT * FROM secretary WHERE minister id = 1;

Contributing

Refer to CONTRIBUTING. md for detailed guidelines on how to contribute to this project.

License

This project is licensed under the MIT License.

Additional Resources

1. EER Diagram

o View the Government Health System EER Diagram.pdf for a detailed entity-relationship representation.

2. Sample Data

o Pre-populated sample data is included in the SQL script for easier testing.

Future Enhancements

- Integration with real-time health data systems.
- Adding new entities like patient records, hospital facilities, and emergency response teams.
- Developing a web interface for non-technical users to interact with the database.

For further details, feel free to explore the repository or raise an issue if you encounter any problems.