Project Report

Hospital Management Database

Abstract

The Hospital Management Database project is designed to efficiently manage patients' records, appointments, and billing information in a hospital. It automates record-keeping, tracks treatments, and generates reports for management. The system uses MySQL as the backend database and DBeaver for database management and reporting.

Introduction

Hospitals handle a large number of patients daily, and managing their records manually is inefficient and prone to errors. This project provides a structured database to store and manage patient information, doctor details, visits, and billing. It helps in tracking patient history, scheduling appointments, and generating billing and visit reports, thus improving hospital workflow and reducing administrative workload.

Tools Used

- **Database:** MySQL

- **Management Tool:** MySQL Workbench

- **CSV/Excel:** To store exported visit and billing reports for documentation.

Steps Involved

1. **Database Design:**

   o Create tables: Patients, Doctors, Visits, and Bills with relationships and constraints.

2. **Inserting Sample Data:**

   o Add a few sample records for patients, doctors, visits, and bills for testing purposes.

3. **Queries:**

   o Write SQL queries to retrieve doctor appointments, pending bills, and visit reports.

4. **Stored Procedures & Triggers:**

- o   Create a stored procedure to automate billing.

- o   Create a trigger to update patient status when a bill is paid.

5. **Generating Reports:**

- o   Export visit and billing reports from DBeaver in CSV format for documentation.

Conclusion

The Hospital Management Database project successfully demonstrates how to manage hospital data efficiently. It automates billing, tracks patient history, and generates reports, reducing manual work and errors. The project provides a foundation for further enhancements, such as integrating online appointment scheduling or advanced analytics for hospital management.