

Social Media Database Project Report

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1. Abstract

This project demonstrates the design and implementation of a simplified social media database using MySQL Workbench. The system allows users to create posts, follow other users, like posts, and comment on posts. Advanced database features such as triggers, stored procedures, and views are used to ensure data consistency and provide useful insights. The project showcases fundamental DBMS concepts including relational schema design, normalization, indexing, and SQL queries.

2. Objectives

- To design and implement a relational database for a social media platform.
- To manage user interactions such as posts, likes, comments, and follows.
- To apply triggers and stored procedures for automatic updates.
- To create meaningful queries and views for analysis and reporting.

3. Tools & Technologies

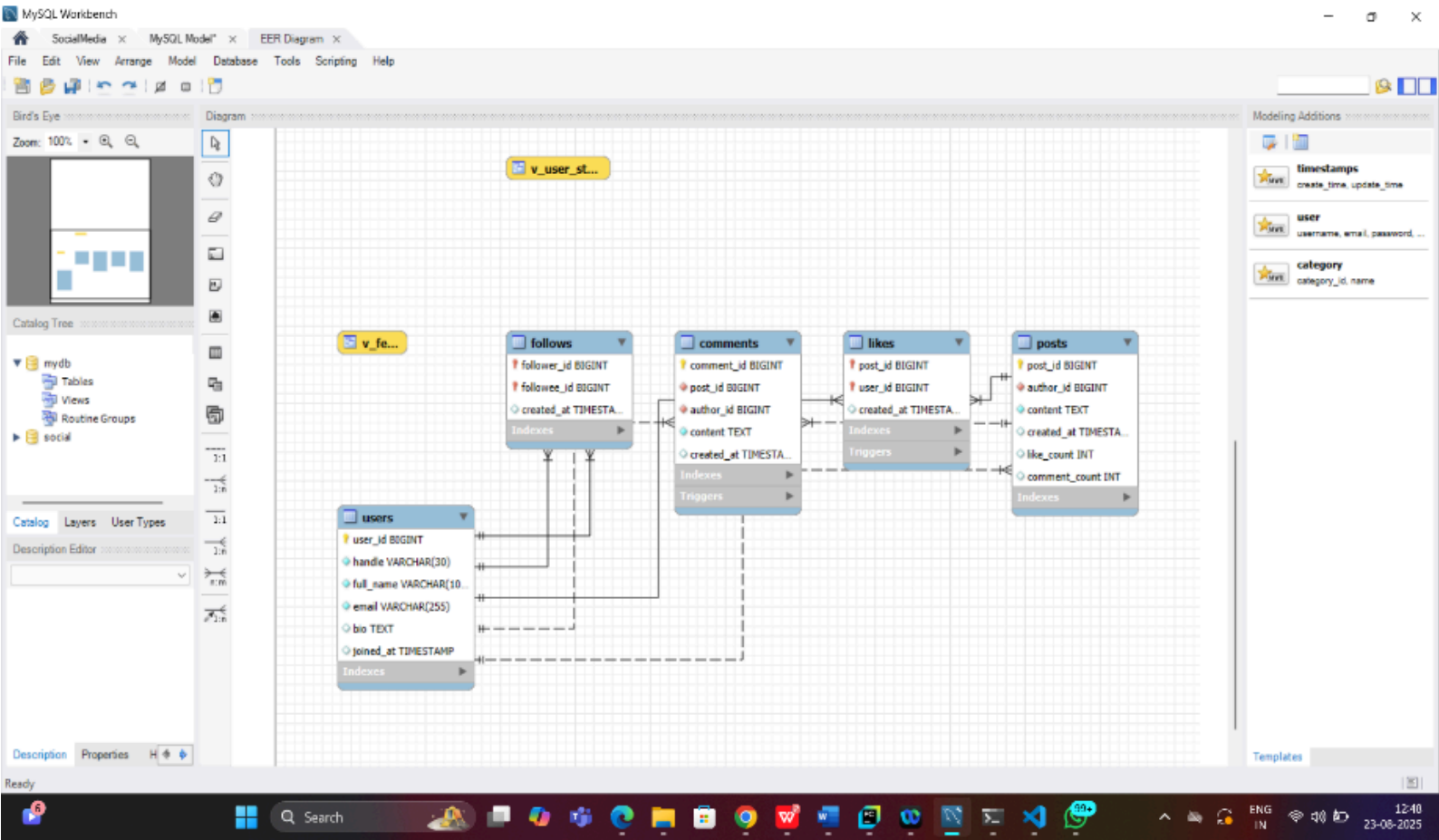
- Database: MySQL (Workbench 8.0)
- Language: SQL
- Environment: MySQL Workbench (GUI for schema design & ERD)

4. Database Schema

The system consists of the following tables:

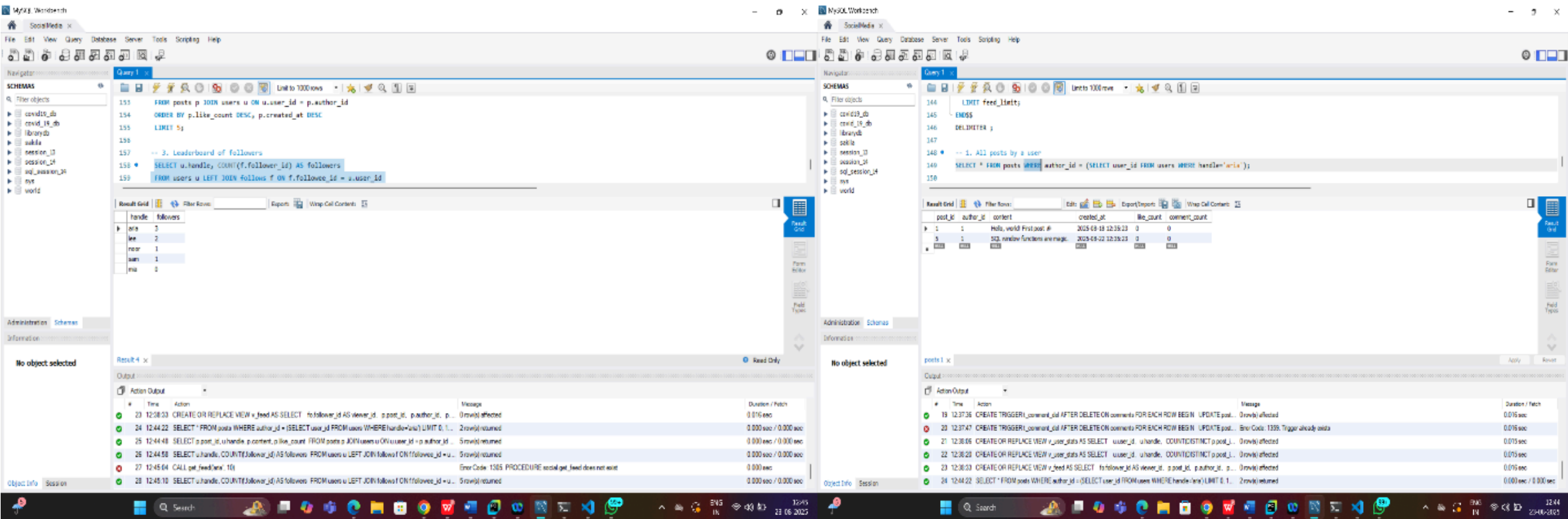
1. Users: Stores basic information of each user.
2. Posts: Contains user posts with content and metadata.
3. Comments: Stores comments made on posts.
4. Likes: Tracks likes on posts.

Figure :Entity–Relationship Diagram of the Social Media Database



5. Deliverables

- a) Queries Executed
- b) Views Created
- c) Triggers Implemented
- d) Stored Procedure



6. Conclusion

The Social Media Database project successfully models core features of a social media platform in a relational database system. It demonstrates database design, SQL implementation, and the use of advanced features like triggers, views, and stored procedures. The project fulfills the internship deliverables and provides a strong foundation for further expansion, such as integrating with a front-end application.

