Project Details

Project Overview:

The Simple Blog System is a database-driven application that allows users to create, edit, and manage blog posts. The system will utilize MySQL as the database management system to store and retrieve data. The project aims to design and implement a simple blog system that demonstrates the basic concepts of database design, normalization, and querying.

Project Goals:

- The primary goals of the Simple Blog System project are to:
- Design a database schema to store blog posts, comments, and user information using MySQL.
- Implement a simple blog system that allows users to create, edit, and manage blog posts.
- Demonstrate the use of SQL queries to retrieve and manipulate data in the database.
- Apply database normalization principles to ensure data consistency and reduce data redundancy.

Project Requirements:

The database design for the Simple Blog System will consist of the following tables:

1- Users

- Id: The primary key of the table, which is auto-incremented.
- username: values (admin, user1, user2)

- email: values (password123, password123, password123)
- password: values (admin@example.com, user1@example.com, user2@example.com)

2- posts

- id: The primary key of the table, which is auto-incremented.
- title: values (Hello World!, My Second Post, User1\'s Post)
- content: values (This is my first post., This is my second post., This is user1\'s post.)
- user_id (foreign key referencing users.id): values (1, 1, 2)

3- comments

- id: The primary key of the table, which is auto-incremented.
- post_id (foreign key referencing posts.id): values (1, 1, 2, 3)
- user_id (foreign key referencing users.id): values (1, 2, 1, 2)
- comment_text: values (Nice post!, I agree!, Good job!, Thanks!)

Project Deliverables:

The project deliverables include:

A. Explore Data

Display all data on the tables.

B. Questions

1) Find the titles and contents of all posts.
2) Retrieve all posts by a specific user.
3) Retrieve all comments for a specific post.

4) Retrieve the username of the user who made a specific comment.
5) Retrieve the count of comments for each post.
6) Retrieve the top 5 most commented posts.
7) Retrieve all users who have commented on a specific post.
8) Find the titles and usernames of all posts.
9) Find the titles and number of comments for all posts.
10) Find the usernames and number of posts for each user, with a "Post Count" column that displays "Many" for users with more than 5 posts, "Few" for users with 2 to 5 posts, and "None" for users with no posts.
11) Find the usernames and number of comments for each user, with a "Comment Count" column that displays "Active" for users with more than 10 comments, "Moderate" for users with 5 to 10 comments, and "Inactive" for users with fewer than 5 comments.
12) Find the number of posts for each user, excluding posts with no comments.
13) Find the usernames and number of posts and comments for each user, sorted by the total number of posts and comments in descending order.
14) Create a stored procedure for any two query of the above.
15) Save any Query in views.