

Database Final Project

Facebook Database with Login Page

1. Design ERD and Schema with entities (**Login – User – Page – Post – Friend – [User-Post Relationship] - Chat**)

a. User

A user is one of the most important entities in Facebook. Each user has the following attributes.

- First Name — — Text
- Last Name — — Text
- DOB — — Date
- Password (Hashed) — — Hash Key
- Email — — Text
- Phone — — Integer
- About — —Text

b. Page

A page is something that is followed by many users in Facebook. Pages are responsible for sharing posts in Facebook and they should be accessible via the profile pages and their respective timeline.

- Name — — Text
- Date of creation — — Timestamp
- Created by — — Foreign Key References User
- Company Email — — Text
- Total Likes — — Integer

c. Post

A post has the following attributes

- Title — — Text
- Created by — — Foreign Key References User
- Date of creation — — Timestamp
- Likes — — Integer

d. Friend

Facebook friend is a relationship that exists between two users in Facebook. One user can have multiple such friends. The relationship has the following attributes.

- Primary Key of 1st Person
- Primary Key of 2nd Person
- Time — — Timestamp

e. User-Post Relationship

There are two possibilities for a post.

- User shares a post.
- User creates a post.

In the first case, we fetch the ID of the post. In the latter case, we create a post and obtain its ID. This relationship has the following attributes.

- User ID — — References User Table
- Post ID — — References Post table.
- Time of Sharing/Creation — — Timestamp
- Shared/Created — — Boolean for Created

A post can be shared by multiple users and a user can share multiple posts.

f. Chat

So, how do we actually store a set of messages communicated by a set of users? For every group chat, we create a new table, which has the following attributes.

- Message — — Text
- User 1 — — References User Table
- User 2 — — References User Table
- Time — — Timestamp

If a user sends a message, an insert query is sent to this table.

2. Implement database in PHPMyAdmin with MYSQL
3. Enter data for at least 3 users.
4. Creating a login and signup interface and connect it with database using php.
5. Create simple page to add new post and view logged in user posts

Notes:

- Each team consists of 3 to 5 people.
- The discussion of the project will be from 18/5/2023 to 21/5/2023.
- The user logs in, and if his account is registered, he will enter the database. If he is not registered, he will not enter the database.