

Lab 8: Database Interaction

Objective

The objective of this lab is to make the data of the social network developed during the course persistent through the use of a database.

Activity description

Specifically, you are required to:

1. **Create an SQLite database (SQLite)** for the social network using the [DB Browser for SQLite](#) tool.

The database must include three tables connected to each other:

- a. **USERS table** with the following fields:

1. `id` (unique for each user, primary key)
2. `nickname`
3. `password`
4. `profile_image` (path to the user's profile image)

- b. **POSTS table** with the following fields:

1. `id` (unique for each post, primary key)
2. `publication_date`
3. `text`
4. `post_image` (optional, path to the post image)
5. `user_id` (foreign key linking the post to the user who created it)

- c. **COMMENTS table** with the following fields:

1. `id` (unique for each comment, primary key)
2. `publication_date`
3. `text`
4. `post_id` (foreign key linking the comment to the post)

5. `user_id` (foreign key linking the comment to the user who wrote it)
6. `rating`
7. `comment_image` (optional, path to the comment image)

2. **Include the database in the project** and modify the application code so that posts are retrieved directly from the database instead of from the in-memory Python data structure. To do this, it is recommended to create a separate file containing the functions needed to access and query the database.