Project Title: Micro Blog Web App

Project Description: A web application allowing users to create, view, like, and comment on micro blogs. Users can manage their accounts and posts, with features for registration, login, and password recovery.

Scope:

- **User Authentication**: Login, registration, and password recovery.
- **Blog Management**: Create, update, delete, like, and comment on blogs.
- **User Profile**: Update user information and profile picture.
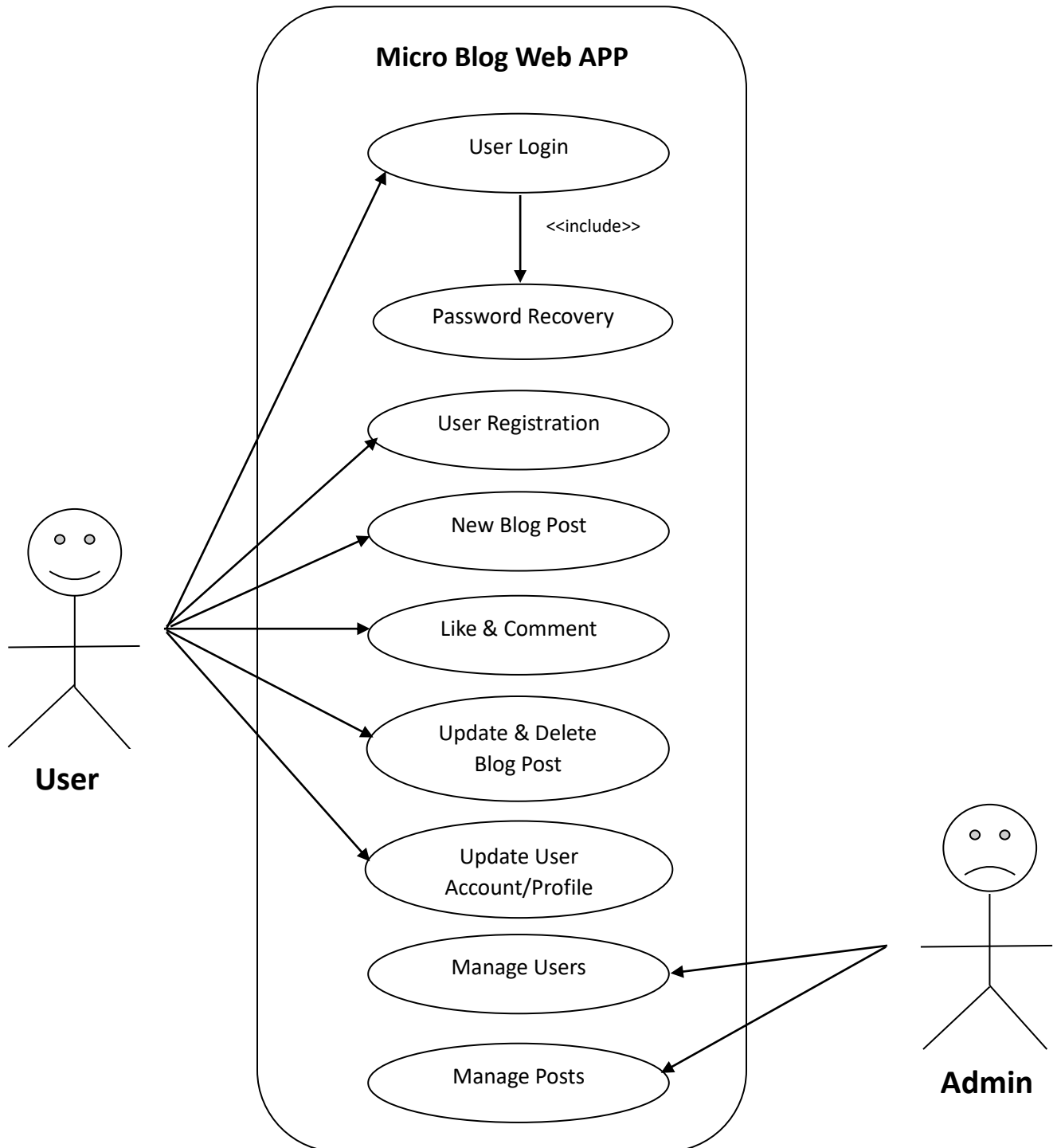
Requirements

1. Functional Requirements

- **Login Module**: Users can log in; includes a "Forget Password" feature.
- **Registration Module**: Users can register for an account.
- **Home Page**: Displays all users' blogs with options to like and comment.
- **New Post Module**: Users can create new blogs with a title and content.
- **Profile Page**: Users can update their name etc. and profile picture.
- **Post Management**: Users can update and delete their own posts.

2. Non-Functional Requirements

- **Performance**: Fast loading and response times.
- **Security**: Secure user authentication and data protection.
- **Usability**: User Friendly interface.
- **Reliability**: Stable and consistent performance.

Use Cases Diagram

Micro Blog Web APP

- User Login
- Password Recovery
- User Registration
- New Blog Post
- Like & Comment
- Update & Delete Blog Post
- Update User Account/Profile
- Manage Users
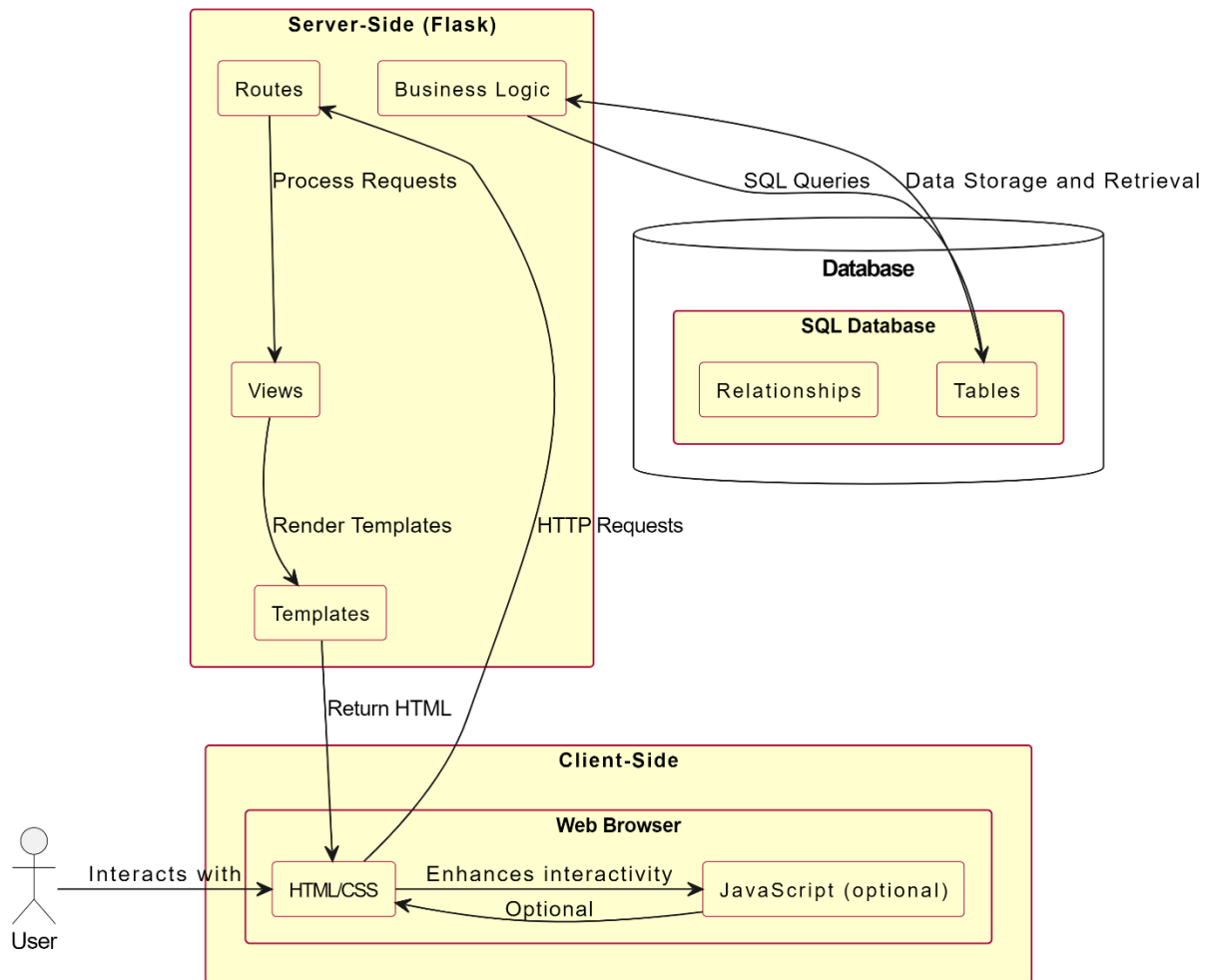- Manage Posts

<<include>>

User

Admin

Tools and Technology

- **Front End**: HTML, CSS
- **Back End**: Flask (Python)
- **Database**: SQLite for development and if need to deploy the application so will switch to PostgreSQL.
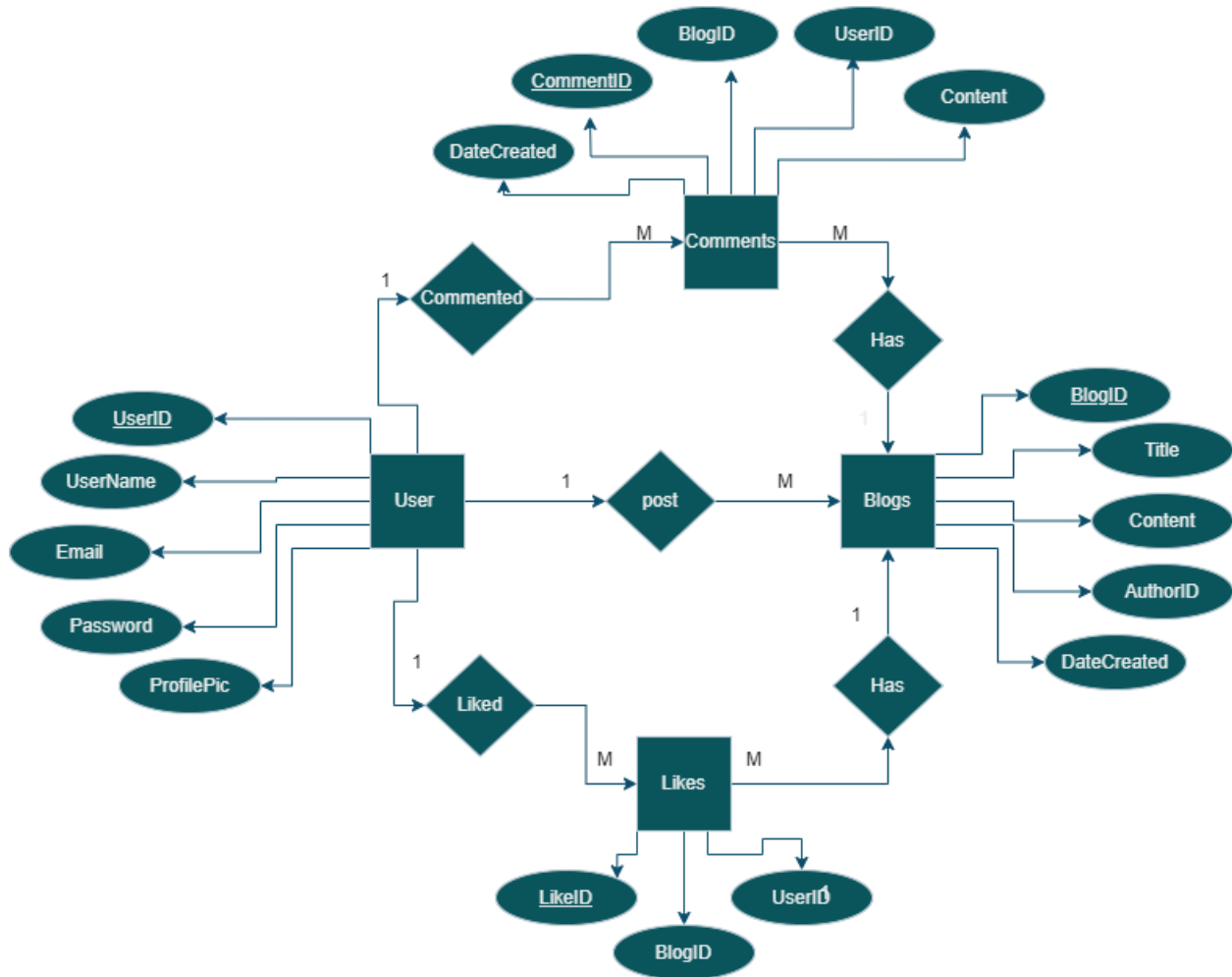
System Architecture

- **System Layout**:

- **ER Diagram**:
  - Users: UserID, Username, Email, Password, ProfilePicture
  - Blogs: BlogID, Title, Content, AuthorID, DateCreated
  - Comments: CommentID, BlogID, UserID, Content, DateCreated
  - Likes: LikeID, BlogID, UserID

Wireframes

Following are simple front-end design or wireframes that how my web app will look like.

- **Login Page**: Input fields for username, password, and a "Forget Password" link.

**Micro Blog Web App
Registration**

Email

something@gmail.com

Password

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Login   **Forgot Password?**

- **Registration Page**: Input fields for username, email, and password.

- **Home Page**: List of blogs with like and comment buttons.

- **New Post Page**: Input fields for title and content.

- **Profile Page**: Fields for updating name and profile picture.