Name: Shahzaib khan

Lab 10: Project: Social Media Platform

Task 2: To write software requirements specification

Software Requirements Specification (SRS) Functional Requirements

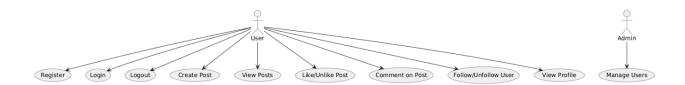
- 1. Users can register and log in.
- 2. Only authenticated users can create posts, comment, like The posts.
- 3. Admin users can manage (delete) posts and users.
- 4. Users can view a feed of posts.
- 5. Users can follow/unfollow other users.
- 6. Input validation is enforced on all forms.

Non-Functional Requirements:

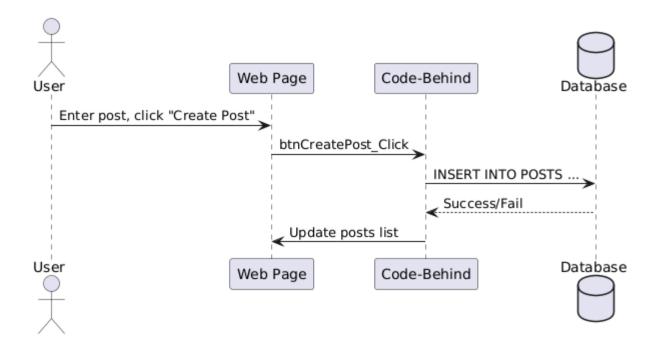
- 1. The application must be responsive and user-friendly.
- 2. Passwords must be securely stored (hashed).
- 3. All user input must be validated and sanitized.
- 4. The application must maintain user sessions securely.

Task 3: To develop the analysis and design model of web application including:

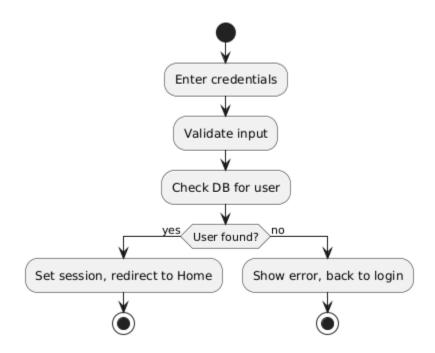
1) Use Case Model:



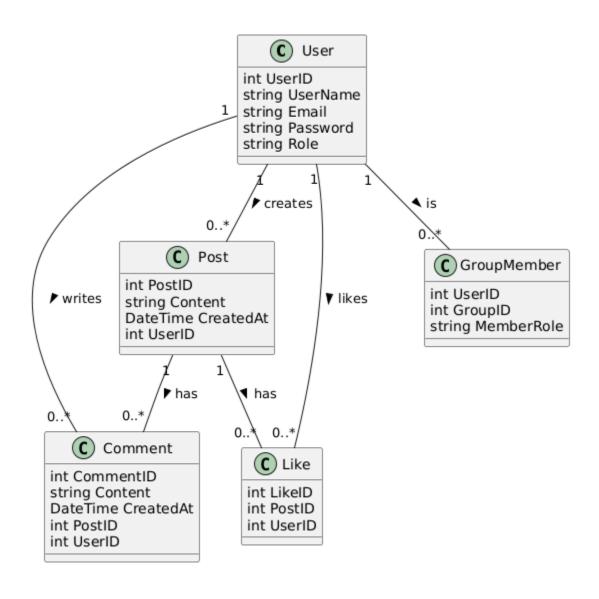
2) Sequence Diagram:



3) Activity Diagram:



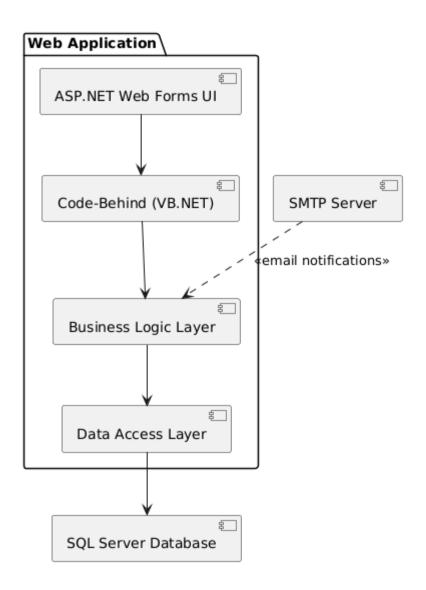
4) Class Diagram:



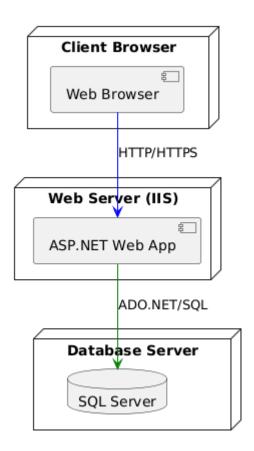
Task 3A:

To develop component model and deployment model

Component Model:



Deployment Model:

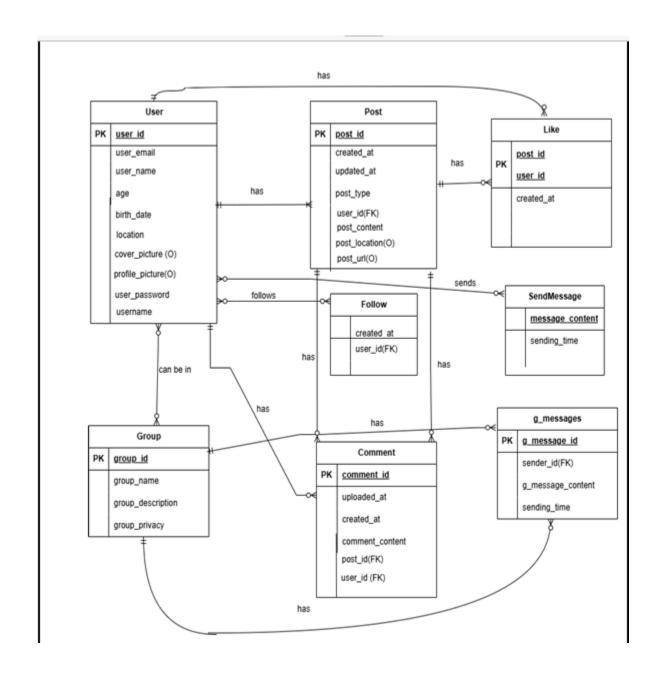


Task 4:

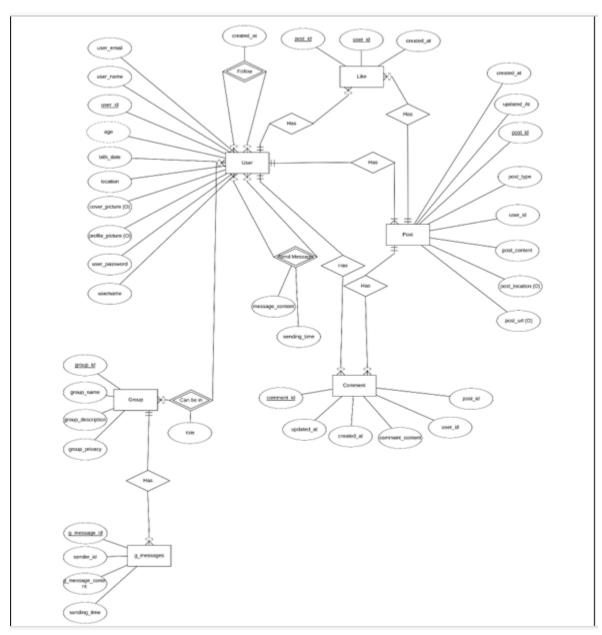
Develop database model including:

- ER Model
- Relational Model
- Normalization of relational model
- Physical Model
- SQL Implementation

ER MODEL:



ER diagram:



Relational Schema:

