Dr. D. Y. Patil School of MCA

Affiliated To Savitribai Phule University

NAAC Accredited 'A' Grade

Department MCA

PROJECT Review II

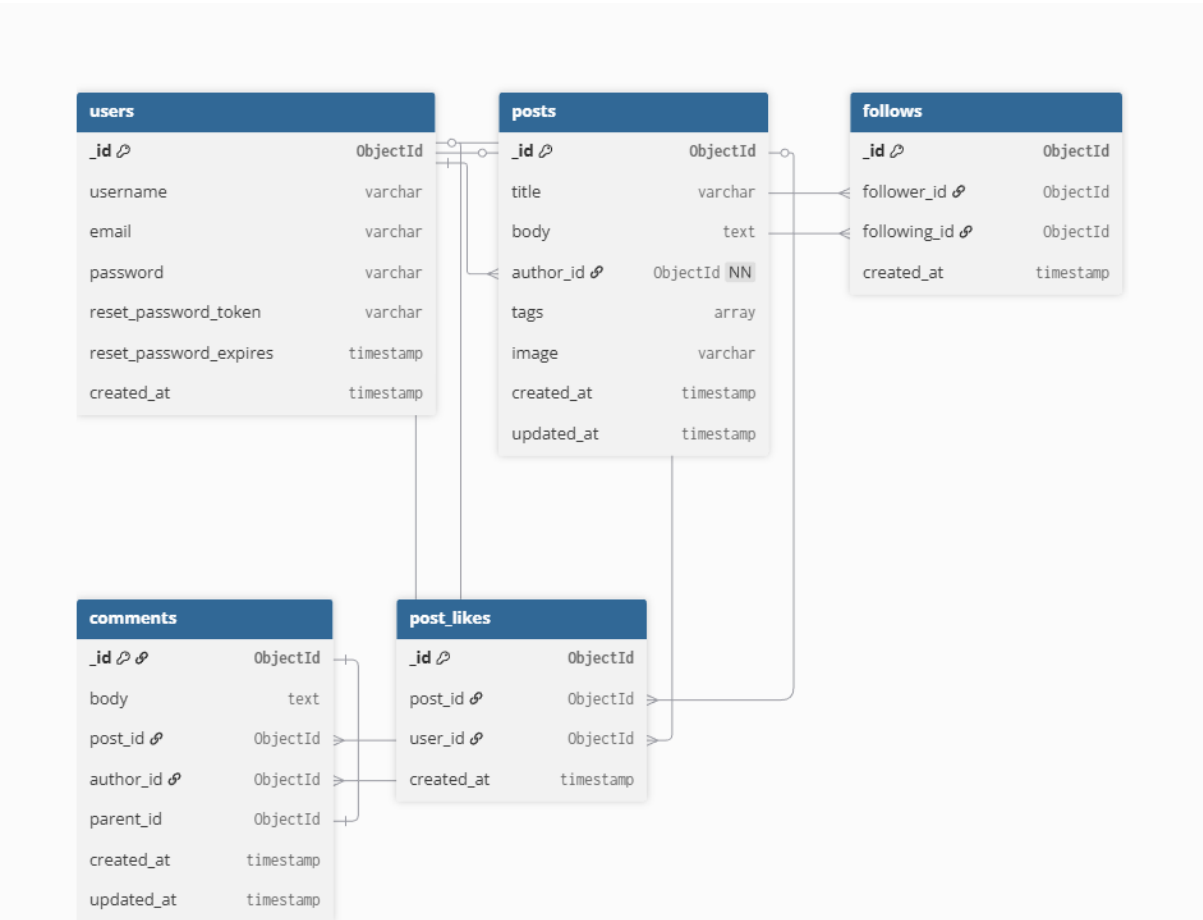## ON

Blog Platform with CMS

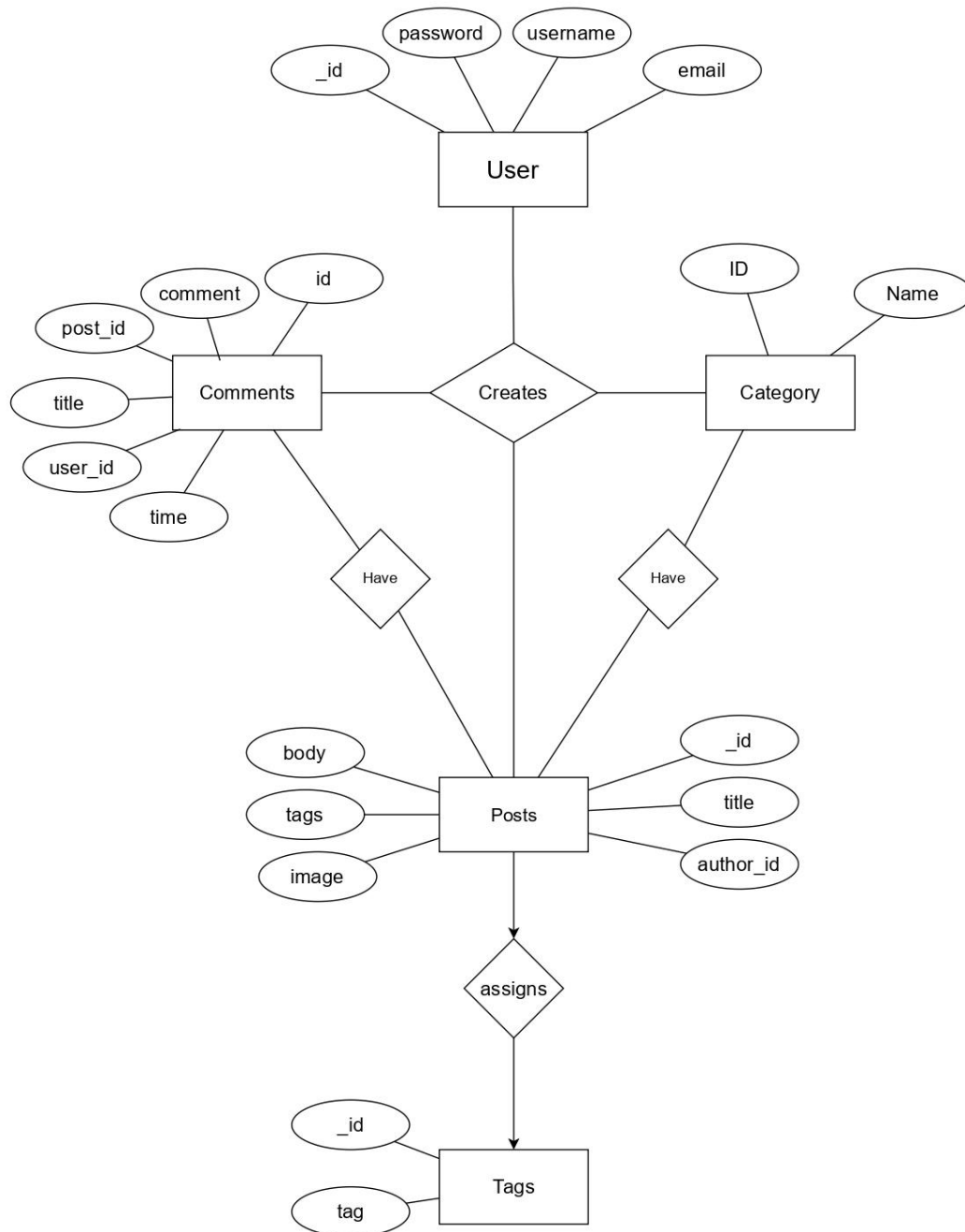Academic Year 2025-2026

MCA- I Semester-1

Submitted to: Submitted by:
Prof. Dr. Zameer S Mulla   Lokesh Patil
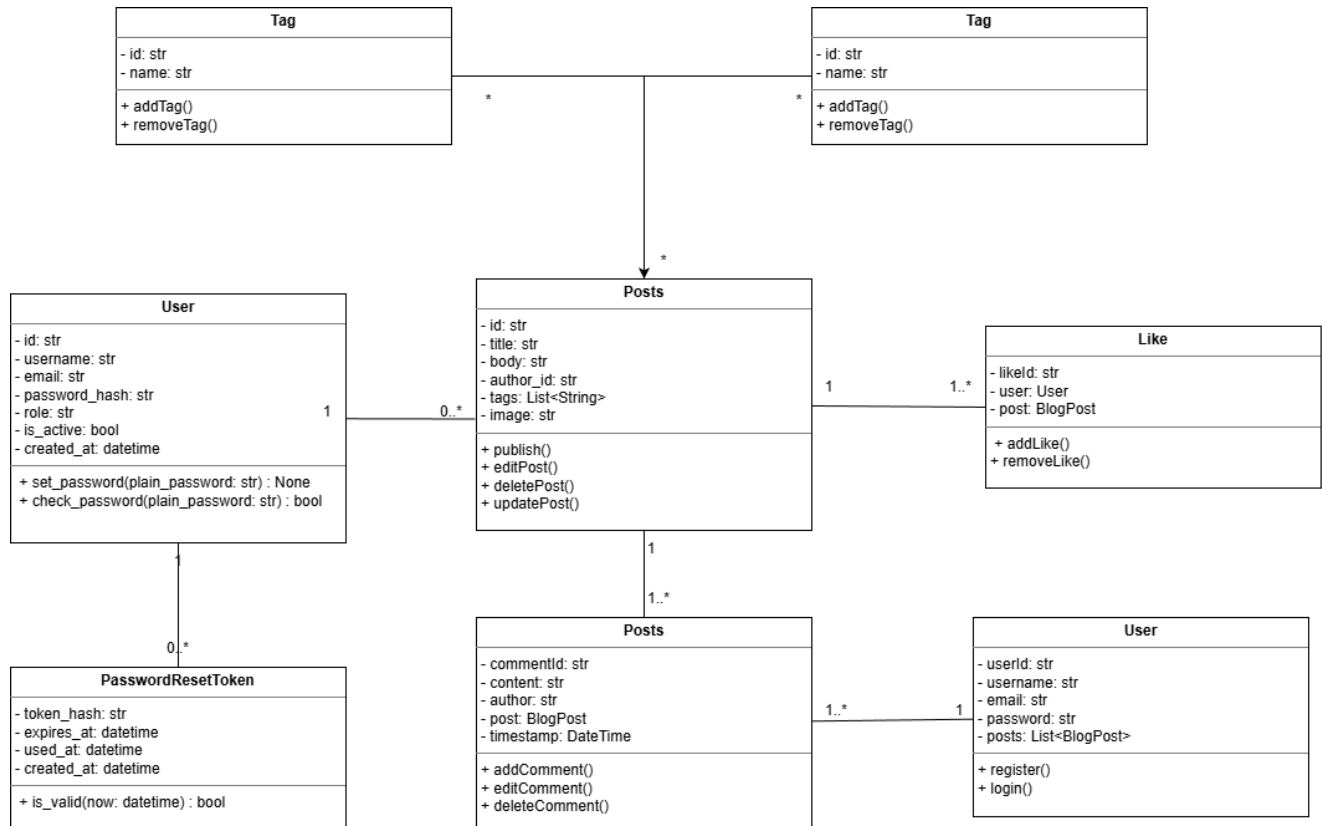Project Guide
DYPSOMCA

Database Design Verification

users
_id 🔑	ObjectId
username	varchar
email	varchar
password	varchar
reset_password_token	varchar
reset_password_expires	timestamp
created_at	timestamp

posts
_id 🔑	ObjectId
title	varchar
body	text
author_id 🔗	ObjectId NN
tags	array
image	varchar
created_at	timestamp
updated_at	timestamp

follows
_id 🔑	ObjectId
follower_id 🔗	ObjectId
following_id 🔗	ObjectId
created_at	timestamp

comments
_id 🔑🔗	ObjectId
body	text
post_id 🔗	ObjectId
author_id 🔗	ObjectId
parent_id	ObjectId
created_at	timestamp
updated_at	timestamp

post_likes
_id 🔑	ObjectId
post_id 🔗	ObjectId
user_id 🔗	ObjectId
created_at	timestamp

ERD Diagram

UML Diagrams

1. Class Diagram

Tag

- id: str
- name: str

+ addTag()
+ removeTag()

Tag

- id: str
- name: str

+ addTag()
+ removeTag()

User

- id: str
- username: str
- email: str
- password_hash: str
- role: str
- is_active: bool
- created_at: datetime

+ set_password(plain_password: str) : None
+ check_password(plain_password: str) : bool

Posts

- id: str
- title: str
- body: str
- author_id: str
- tags: List<String>
- image: str

+ publish()
+ editPost()
+ deletePost()
+ updatePost()

Like

- likeId: str
- user: User
- post: BlogPost

+ addLike()
+ removeLike()

PasswordResetToken

- token_hash: str
- expires_at: datetime
- used_at: datetime
- created_at: datetime

+ is_valid(now: datetime) : bool

Posts

- commentId: str
- content: str
- author: str
- post: BlogPost
- timestamp: DateTime

+ addComment()
+ editComment()
+ deleteComment()

User

- userId: str
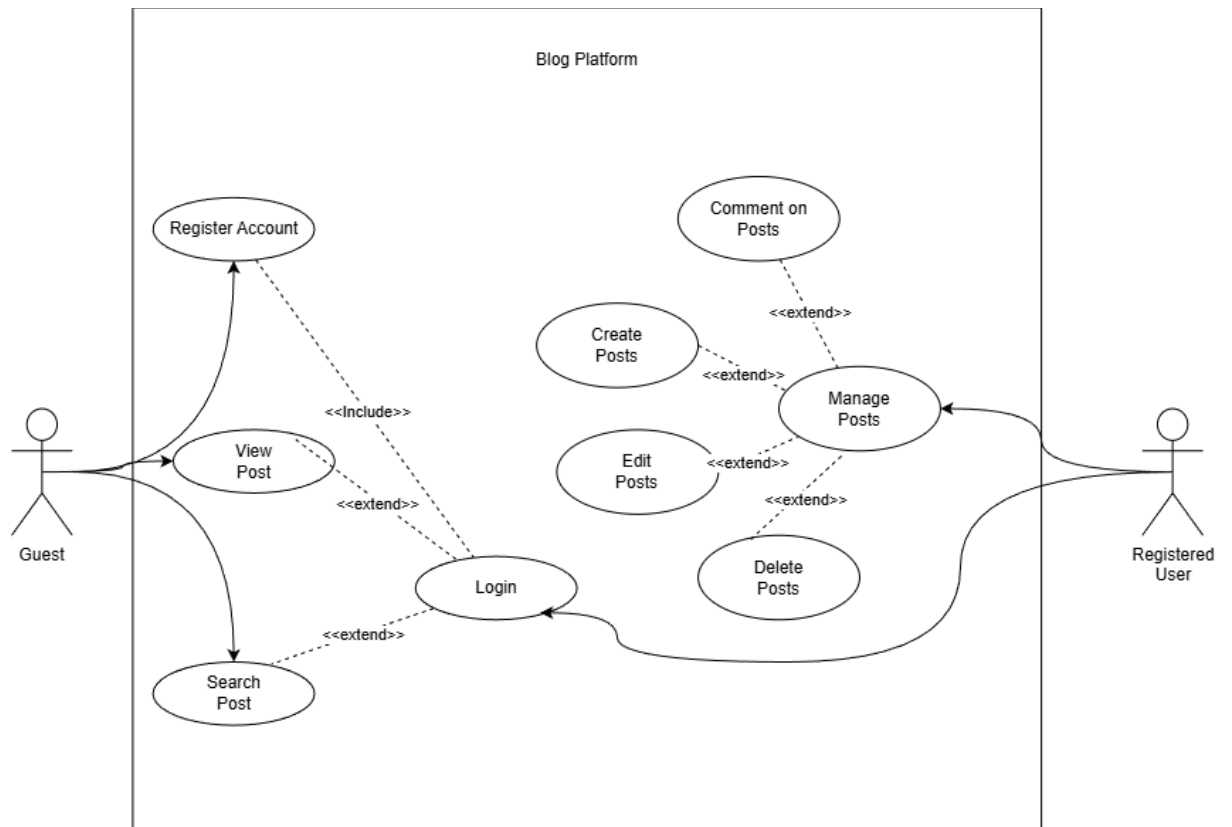- username: str
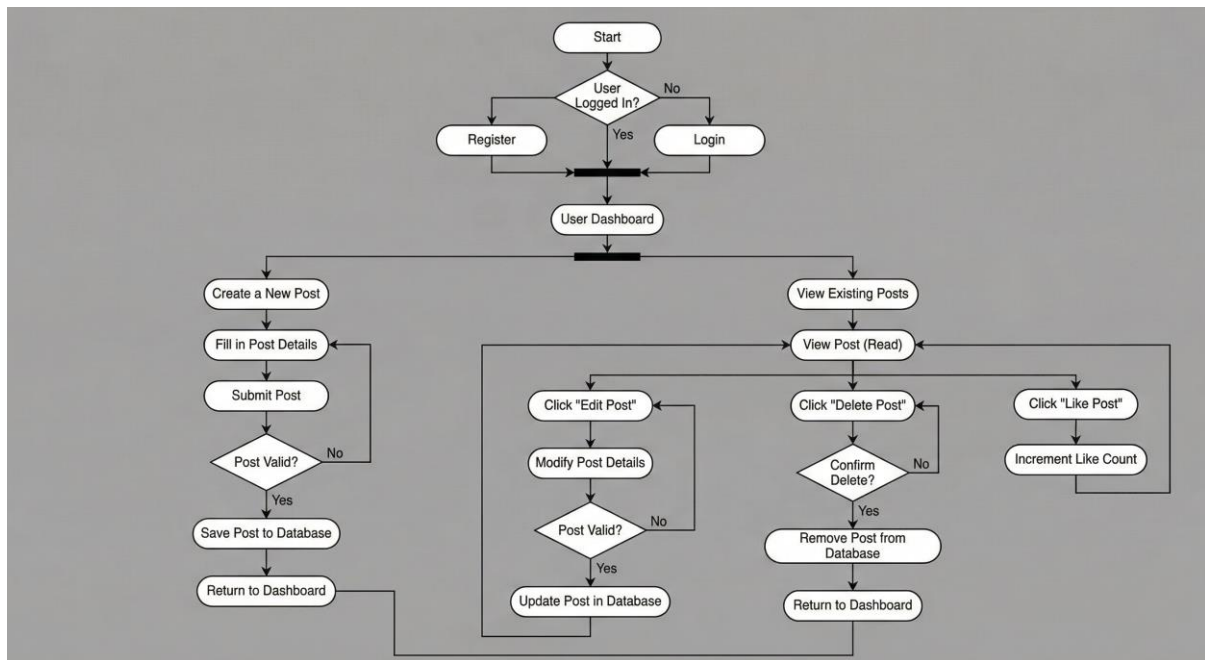- email: str
- password: str
- posts: List<BlogPost>
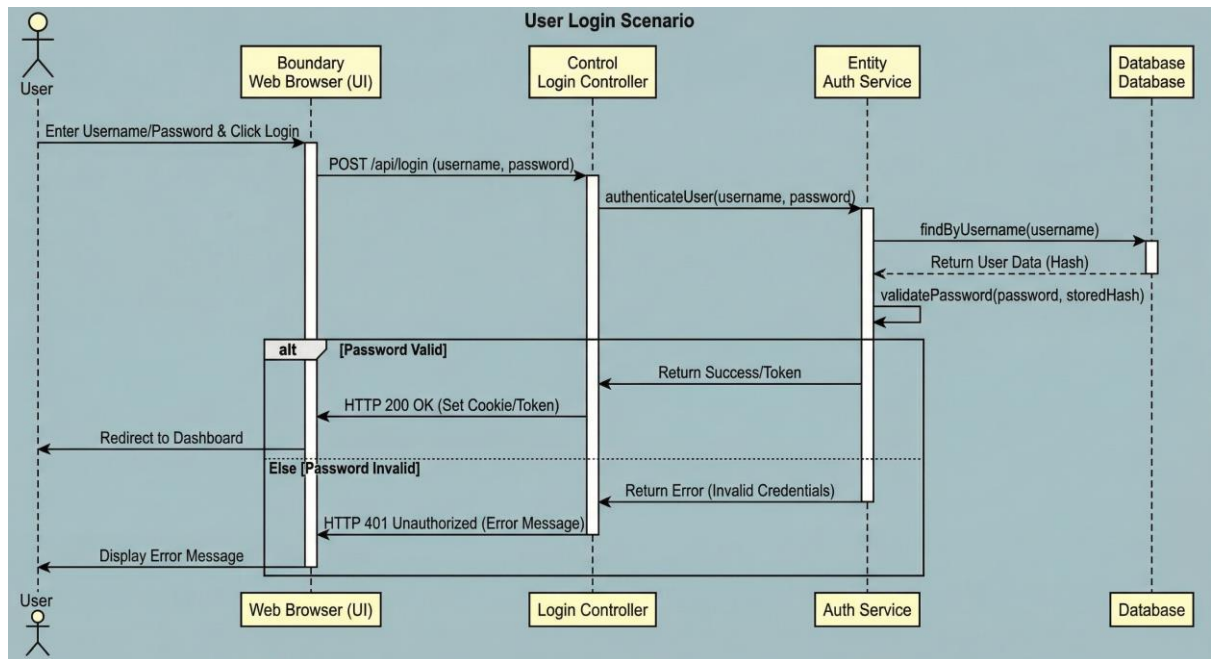
+ register()
+ login()

2. Use Case Diagram

3. Activity Diagram

4. Sequence Diagram

Login Sequence Diagram

Post Read/Write Sequence Diagram