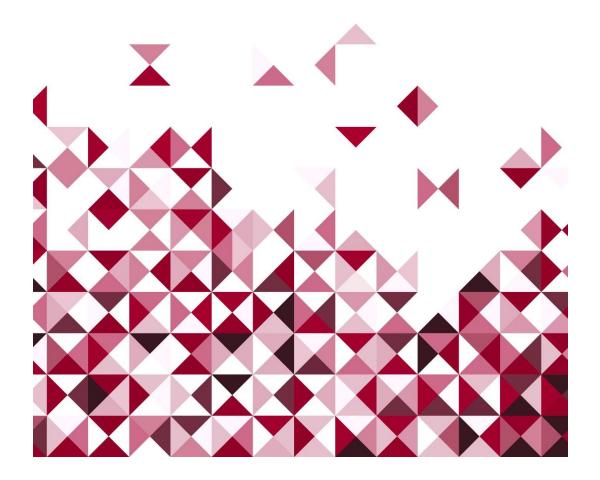
Module 8 Lab 1

A Social Media Application Entity Relationship Logical and Physical Models

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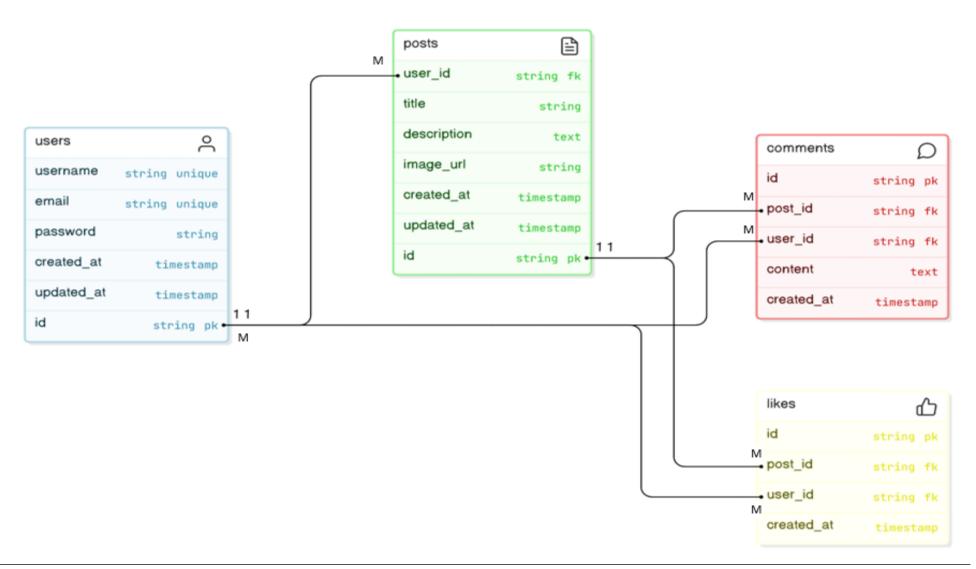


Requirements for Lab 1:

- Design a Logical and Physical Model for a general Blogging application.
- Requirements:
- The system should store users (using basic user-related fields)
- The users should be able to create multiple posts (posts should be very basic with title, description and image)
- Other users should be able to like and comment on the posts.

Logical Model

A SOCIAL MEDIA DB LOGICAL MODEL



Physical Model (Mongo DB)

```
User collection:
"_id": ObjectId("..."), // MongoDB generated
"username": "unique_username",
"email": "user@example.com",
"password": "hashed_password",
"created_at": ISODate("2023-10-01T00:00:00Z"),
"updated_at": ISODate("2023-10-01T00:00:00Z")
```

Physical Model (Mongo DB)

```
Post collection:
"_id": ObjectId("..."), // MongoDB generated
"user_id": ObjectId("..."), // Reference to User
"title": "Post Title",
"description": "Post description here.",
"image_url": "http://example.com/image.jpg",
"created_at": ISODate("2023-10-01T00:00:00Z"),
"updated_at": ISODate("2023-10-01T00:00:00Z"),
```

Physical Model (Mongo DB)

```
"comments": [
     "comment_id": ObjectId("..."), // Unique comment ID
     "user_id": ObjectId("..."), // Reference to User
     "content": "Here is a comment:",
     "created_at": ISODate("2023-10-01T00:00:00Z")
"likes": [
   ObjectId("..."), // Array of User IDs who liked the post supposed to be here
   ObjectId("...")
```

END