PROMINEO TECH

Relational Databases with MySQL Week 3 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: Using a text editor of your choice, write the queries that accomplishes the objectives listed below. Take screenshots of the queries and results and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your Java project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

You have been asked to create a database for a new social media application that your company is developing.

The database must store user data such as username, email, password, etc...

Users are able to post and comment. So, your database must also store post and comment data.

We need to know which user made which posts.

We also need to know which user made which comments, and which post a comment is on.

Posts and comments should both include the time they were created, and what the content of the post or comment is.

Create an Entity Relationship Diagram (ERD) using draw.io to model the database you will create. Insert a screenshot of the ERD in the screenshots section below.

Write a SQL script to create the database. Insert a screenshot of the SQL in your script.

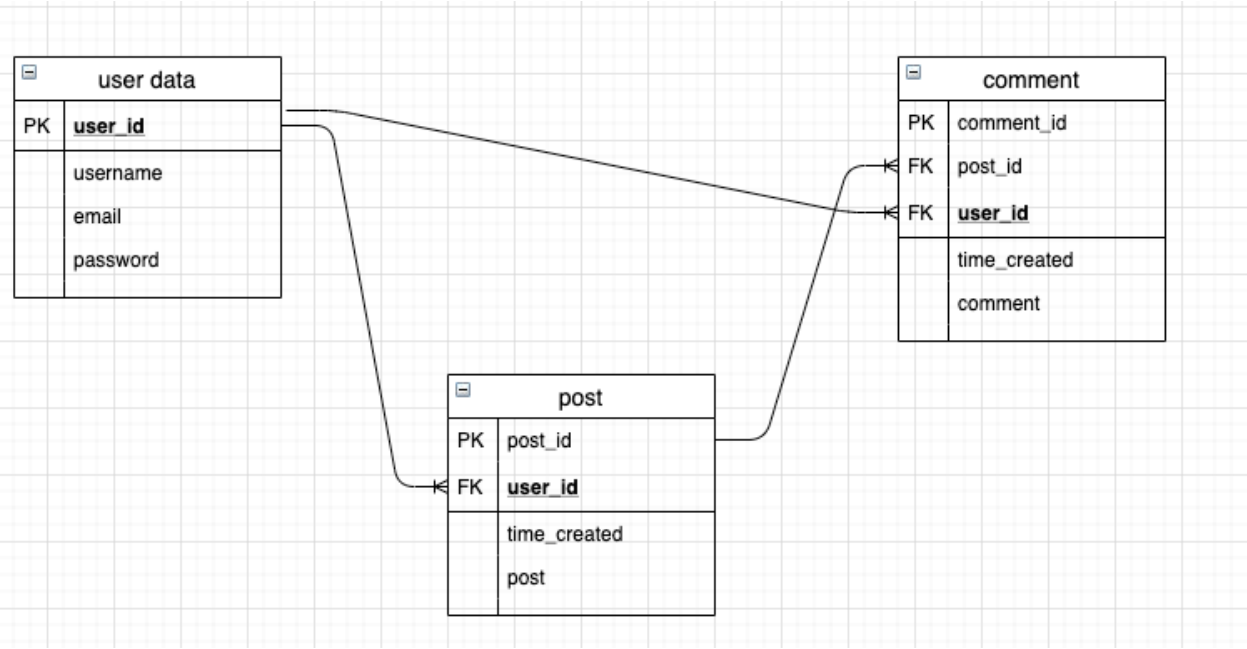
Hints:

You will only need three tables.

Two tables will have foreign key references.

One table will have two foreign key references.

Screenshots:



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```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 143
Server version: 8.0.20 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show tables;
ERROR 1046 (3D000): No database selected
mysql> use users;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----------------+
| Tables_in_users |
+-----------------+
| comments        |
| posts           |
| userdata        |
+-----------------+
3 rows in set (0.00 sec)

mysql> desc comments;
+--------------+-------------+------+-----+-------------------+-------------------+
| Field        | Type        | Null | Key | Default           | Extra             |
+--------------+-------------+------+-----+-------------------+-------------------+
| comment_id   | int         | NO   | PRI | NULL              | auto_increment    |
| post_id      | int         | NO   | MUL | NULL              |                   |
| user_id      | int         | NO   | MUL | NULL              |                   |
| time_created | datetime    | YES  |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| comment      | varchar(30) | YES  |     | NULL              |                   |
+--------------+-------------+------+-----+-------------------+-------------------+
5 rows in set (0.03 sec)

mysql> desc posts;
+--------------+--------------+------+-----+-------------------+-------------------+
| Field        | Type         | Null | Key | Default           | Extra             |
+--------------+--------------+------+-----+-------------------+-------------------+
| post_id      | int          | NO   | PRI | NULL              | auto_increment    |
| user_id      | int          | NO   | MUL | NULL              |                   |
| time_created | datetime     | YES  |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| post         | varchar(150) | YES  |     | NULL              |                   |
+--------------+--------------+------+-----+-------------------+-------------------+
4 rows in set (0.01 sec)

mysql> desc userdata;
+----------+-------------+------+-----+---------+----------------+
| Field    | Type        | Null | Key | Default | Extra          |
+----------+-------------+------+-----+---------+----------------+
| user_id  | int         | NO   | PRI | NULL    | auto_increment |
| username | varchar(20) | NO   |     | NULL    |                |
| password | varchar(20) | NO   |     | NULL    |                |
| email    | varchar(20) | NO   |     | NULL    |                |
+----------+-------------+------+-----+---------+----------------+
4 rows in set (0.01 sec)
```

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```sql
create database if not exists users;

use users;

drop table if exists comments;
drop table if exists posts;
drop table if exists userdata;


create table userdata (
        user_id int(11) not null auto_increment,
        username varchar(20) not null,
        password varchar(20) not null,
        email varchar(20) not null,
        primary key(user_id)
);

create table posts (
        post_id int(11) not null auto_increment,
        user_id int(11) not null,
        time_created datetime default current_timestamp,
        post varchar(150),
        primary key (post_id),
        foreign key(user_id) references userdata(user_id)
);

create table comments (
    comment_id int(11) not null auto_increment,
    post_id int(11) not null,
    user_id int(11) not null,
    time_created datetime default current_timestamp,
    comment varchar(30),
    primary key(comment_id),
    foreign key (post_id) references posts(post_id),
    foreign key (user_id) references userdata(user_id)
);
```

URL to GitHub Repository: