Relational Databases with MySQL Week 9 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 to the repository. Additionally, push an .sql file with all your queries and your ERD to the same 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.

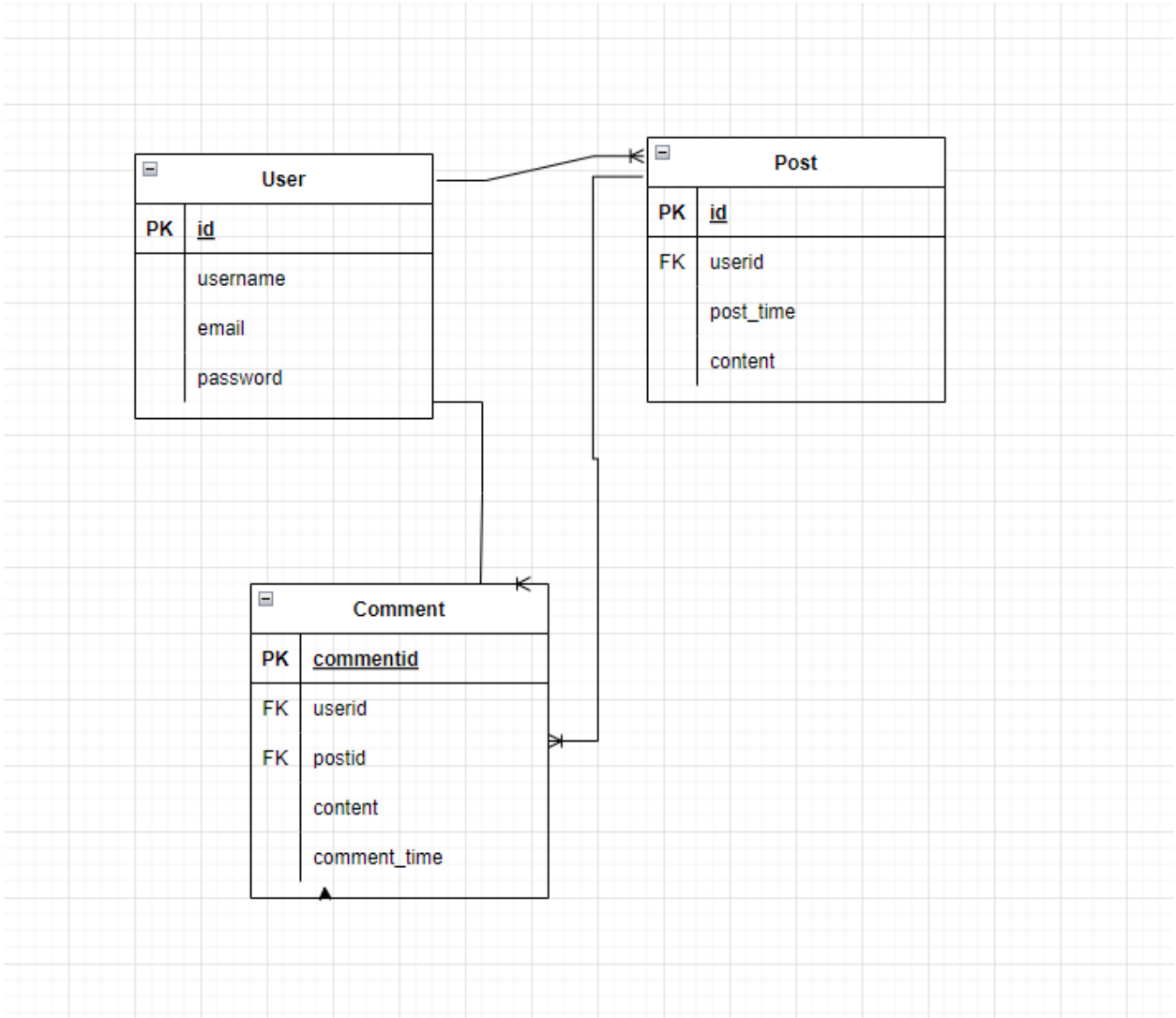
Hints:

You will only need three tables.

Two tables will have foreign key references.

One table will have two foreign key references.

Screenshots:



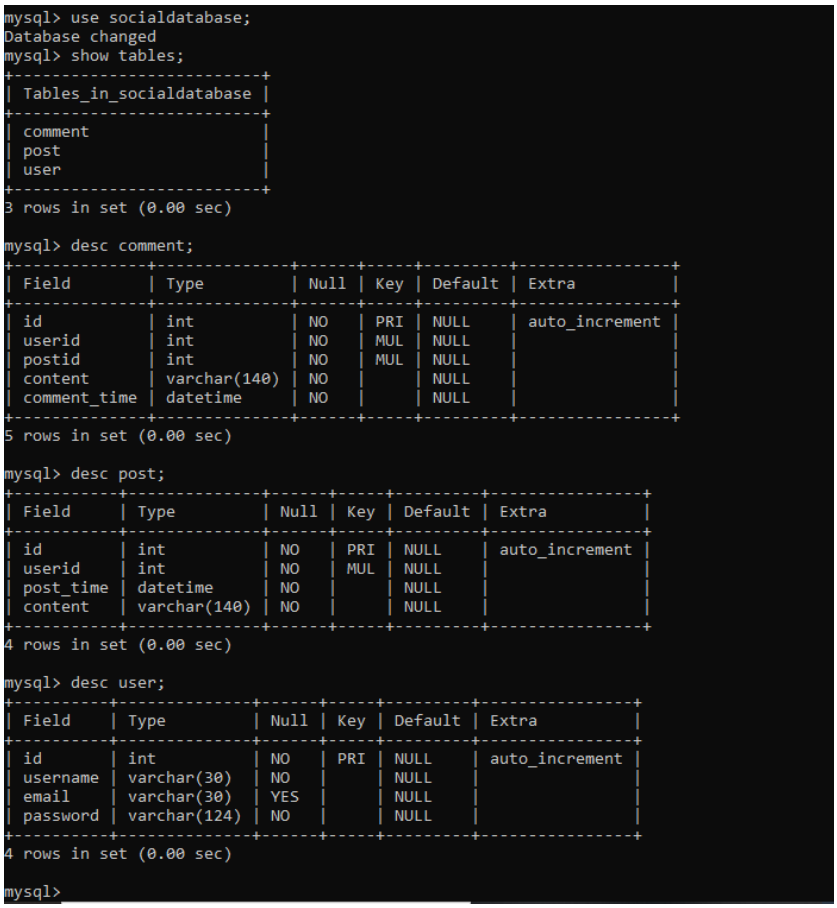
```sql
create database if not exists SocialDatabase;
use SocialDatabase;

drop table if exists comment;
drop table if exists post;
drop table if exists user;

create table user (
    id int(11) not null auto_increment,
    username VARCHAR(30) not null,
    email VARCHAR(30),
    password VARCHAR(124) not null,
    PRIMARY KEY (id)
);

create table post (
    id int not null auto_increment,
    userid int not null,
    post_time datetime not null,
    content VARCHAR(140) not null,
    primary key (id),
    FOREIGN KEY (userid) references user(id)
);

create table comment (
    id int not null auto_increment,
    userid int not null,
    postid int not null,
    content VARCHAR(140) not null,
    comment_time datetime not null,
    primary key (id),
    FOREIGN KEY (userid) references user(id),
    FOREIGN KEY (postid) references post(id)
);
```



```
mysql> use socialdatabase;
Database changed
mysql> show tables;
+--------------------------+
| Tables_in_socialdatabase |
+--------------------------+
| comment                  |
| post                     |
| user                     |
+--------------------------+
3 rows in set (0.00 sec)

mysql> desc comment;
+--------------+--------------+------+-----+---------+----------------+
| Field        | Type         | Null | Key | Default | Extra          |
+--------------+--------------+------+-----+---------+----------------+
| id           | int          | NO   | PRI | NULL    | auto_increment |
| userid       | int          | NO   | MUL | NULL    |                |
| postid       | int          | NO   | MUL | NULL    |                |
| content      | varchar(140) | NO   |     | NULL    |                |
| comment_time | datetime     | NO   |     | NULL    |                |
+--------------+--------------+------+-----+---------+----------------+
5 rows in set (0.00 sec)

mysql> desc post;
+-----------+--------------+------+-----+---------+----------------+
| Field     | Type         | Null | Key | Default | Extra          |
+-----------+--------------+------+-----+---------+----------------+
| id        | int          | NO   | PRI | NULL    | auto_increment |
| userid    | int          | NO   | MUL | NULL    |                |
| post_time | datetime     | NO   |     | NULL    |                |
| content   | varchar(140) | NO   |     | NULL    |                |
+-----------+--------------+------+-----+---------+----------------+
4 rows in set (0.00 sec)

mysql> desc user;
+----------+--------------+------+-----+---------+----------------+
| Field    | Type         | Null | Key | Default | Extra          |
+----------+--------------+------+-----+---------+----------------+
| id       | int          | NO   | PRI | NULL    | auto_increment |
| username | varchar(30)  | NO   |     | NULL    |                |
| email    | varchar(30)  | YES  |     | NULL    |                |
| password | varchar(124) | NO   |     | NULL    |                |
+----------+--------------+------+-----+---------+----------------+
4 rows in set (0.00 sec)

mysql>
```

URL to GitHub Repository:

https://github.com/jaredInElit/Week9CodingAssignment