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.

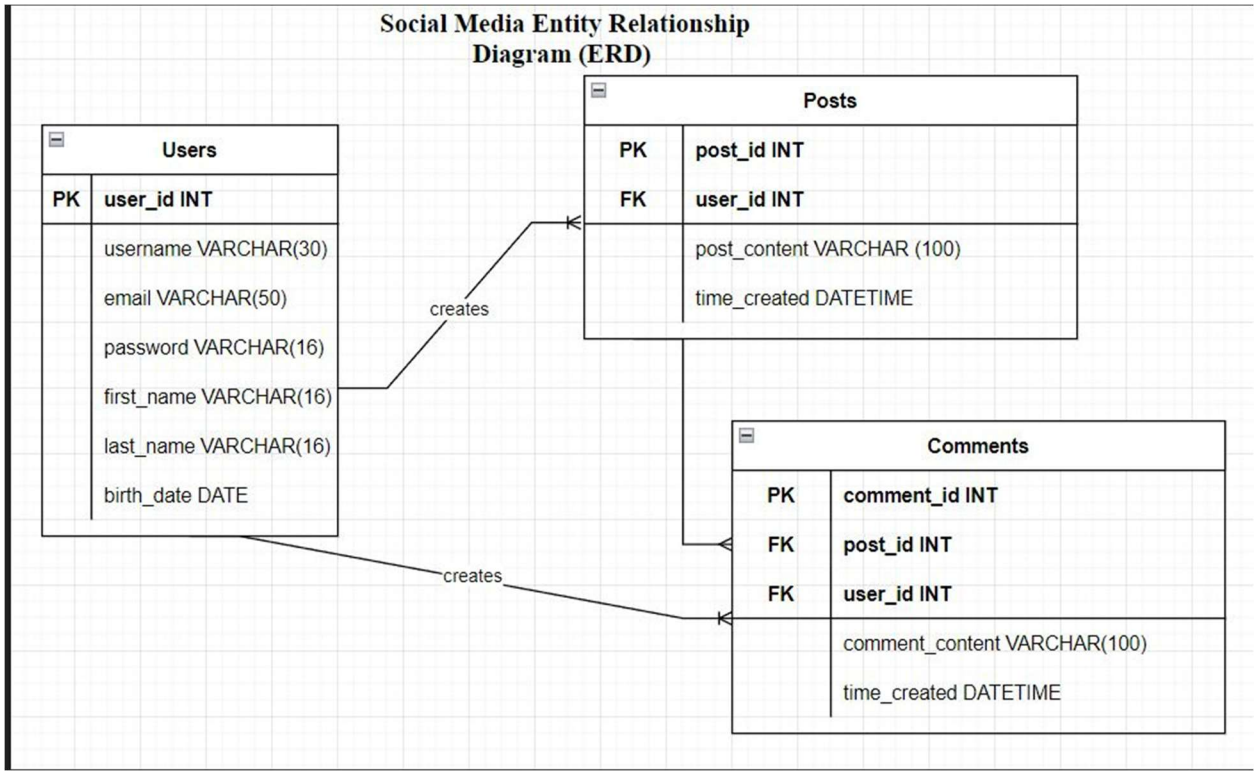
Hints:

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 socialMedia;
USE socialMedia;

CREATE TABLE IF NOT EXISTS Users (
user_id INT UNSIGNED AUTO_INCREMENT PRIMARY KEY,
username VARCHAR(30) NOT NULL UNIQUE,
email VARCHAR(50),
password VARCHAR(16) NOT NULL,
first_name VARCHAR(16),
last_name VARCHAR(16),
birth_date DATE);

CREATE TABLE IF NOT EXISTS Posts (
    post_id INT UNSIGNED AUTO_INCREMENT PRIMARY KEY,
    post_content VARCHAR(100),
    time_created DATETIME DEFAULT CURRENT_TIMESTAMP,
    user_id INT UNSIGNED ,
    FOREIGN KEY (user_id) REFERENCES Users(user_id)
);

CREATE TABLE IF NOT EXISTS Comments (
    comment_id INT UNSIGNED AUTO_INCREMENT PRIMARY KEY,
    comment_content VARCHAR(100),
    time_created DATETIME DEFAULT CURRENT_TIMESTAMP,
    user_id INT UNSIGNED,
    post_id INT UNSIGNED,
    FOREIGN KEY (user_id) REFERENCES Users(user_id),
    FOREIGN KEY (post_id) REFERENCES Posts(post_id)
);

SHOW TABLES;

DESC comments;
DESC users;
DESC posts;

```

```
31 •  SHOW TABLES;
32
33 •  DESC comments;
34 •  DESC users;
35 •  DESC posts;
36
```

Result Grid | Filter Rows: | Export:

	Tables_in_socialmedia
▶	comments
	posts
	users

```
31 •  SHOW TABLES;
32
33 •  DESC comments;
34 •  DESC users;
35 •  DESC posts;
36
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	comment_id	int unsigned	NO	PRI	NULL	auto_increment
	comment_content	varchar(100)	YES		NULL	
	time_created	datetime	YES		CURRENT_TIMESTAMP	DEFAULT_GENERATED
	user_id	int unsigned	YES	MUL	NULL	
	post_id	int unsigned	YES	MUL	NULL	

```
34 •  DESC users;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	user_id	int unsigned	NO	PRI	NULL	auto_increment
	username	varchar(30)	NO	UNI	NULL	
	email	varchar(50)	YES		NULL	
	password	varchar(16)	NO		NULL	
	first_name	varchar(16)	YES		NULL	
	last_name	varchar(16)	YES		NULL	
	birth_date	date	YES		NULL	

```
35 •    DESC posts;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Field	Type	Null	Key	Default	Extra
post_id	int unsigned	NO	PRI	NULL	auto_increment
post_content	varchar(100)	YES		NULL	
time_created	datetime	YES		CURRENT_TIMESTAMP	DEFAULT_GENERATED
user_id	int unsigned	YES	MUL	NULL	

URL to GitHub Repository:

https://github.com/ailimutan/week9_mysql