

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. Untitled Diagram.drawio

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:

```
1 • create database if not exists socialmedia;
2
3 • use socialmedia;
4
5 • drop table if exists comments;
6 • drop table if exists posts;
7 • drop table if exists clients;
8
9
10 • Create table clients(
```

```
10 • Create table clients(
11     id int (10) not null auto_increment,
12     username varchar(30),
13     email varchar(30),
14     pass_word varchar(20),
15     primary key (id));
16
17 • create table posts(
18     id int(10) not null auto_increment,
19     post_content varchar(100),
```

```
Limit to 100 rows
19 post_content varchar(100),
20 post_time datetime default current_timestamp,
21 clients_id int(10),
22 primary key (id),
23 foreign key (clients_id) references clients(id));
24
25 • create table comments (
26 comment_content varchar(100),
27 comment_time datetime default current_timestamp,
28 clients_id int (10),
--
```

Output

```
28 clients_id int (10),
29 posts_id int(10),
30 primary key (clients_id, posts_id),
31 foreign key (clients_id) references clients(id),
32 foreign key (posts_id) references posts(id));
33
34
35 • desc clients;
36 • desc posts;
37 • desc comments;
38
39 • insert into clients (username, email, pass_word) values
40 ('bob', 'bob@bob.com', 'bobby');
--
```

```
Limit to 100 rows
40 ('bob', 'bob@bob.com', 'bobby');
41
42 • insert into posts (post_content) values ('bobby');
43
44 • insert into comments (comment_content, clients_id, posts_id )
45 values ('bobby', '1', '1');
46
47 • select * from clients;
48 • select* from posts;
49 • select* from comments;
--
```

Context f

Output

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|----------------|
| id | int | NO | PRI | NULL | auto_increment |
| username | varchar(30) | YES | | NULL | |
| email | varchar(30) | YES | | NULL | |
| pass_word | varchar(20) | YES | | NULL | |

Result 1 Result 2 Result 3 clients 4 posts 5 comments 6

1 • create database if not exists socialmedia;
2

| Field | Type | Null | Key | Default | Extra |
|--------------|--------------|------|-----|-------------------|-------------------|
| id | int | NO | PRI | NULL | auto_increment |
| post_content | varchar(100) | YES | | NULL | |
| post_time | datetime | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| clients_id | int | YES | MUL | NULL | |

Result 1 Result 2 × Result 3 clients 4 posts 5 comments 6 Read Only Conte

Output

| Field | Type | Null | Key | Default | Extra |
|-----------------|--------------|------|-----|-------------------|-------------------|
| comment_content | varchar(100) | YES | | NULL | |
| comment_time | datetime | YES | | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| clients_id | int | NO | PRI | NULL | |
| posts_id | int | NO | PRI | NULL | |

Result 1 Result 2 Result 3 × clients 4 posts 5 comments 6 Read C

1 • create database if not exists socialmedia;
2

| id | username | email | pass_word |
|------|----------|-------------|-----------|
| 1 | bob | bob@bob.com | bobby |
| NULL | NULL | NULL | NULL |

Result 1 Result 2 Result 3 clients 4 × posts 5 comments 6

2

Result Grid

Filter Rows:

Edit: Export/Import: Wrap

| | id | post_content | post_time | clients_id |
|---|------|--------------|---------------------|------------|
| ▶ | 1 | bobby | 2022-07-01 10:19:51 | NULL |
| * | NULL | NULL | NULL | NULL |

Result 1 Result 2 Result 3 clients 4 posts 5 comments 6

```
1 • create database if not exists socialmedia;
2
```

Result Grid

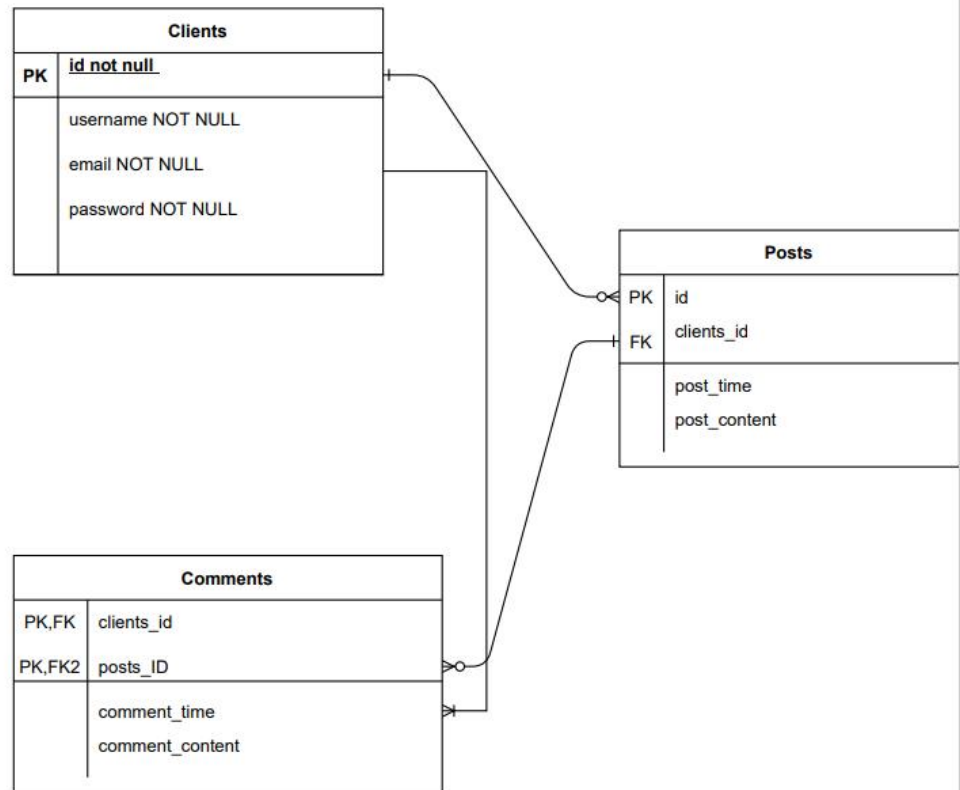
Filter Rows:

Edit: Export/Import: Wrap

| | comment_content | comment_time | clients_id | posts_id |
|---|-----------------|---------------------|------------|----------|
| ▶ | bobby | 2022-07-01 10:19:51 | 1 | 1 |
| * | NULL | NULL | NULL | NULL |

Result Grid

Auto disabled
mar
curre
to



URL to GitHub Repository

: