

# 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 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:

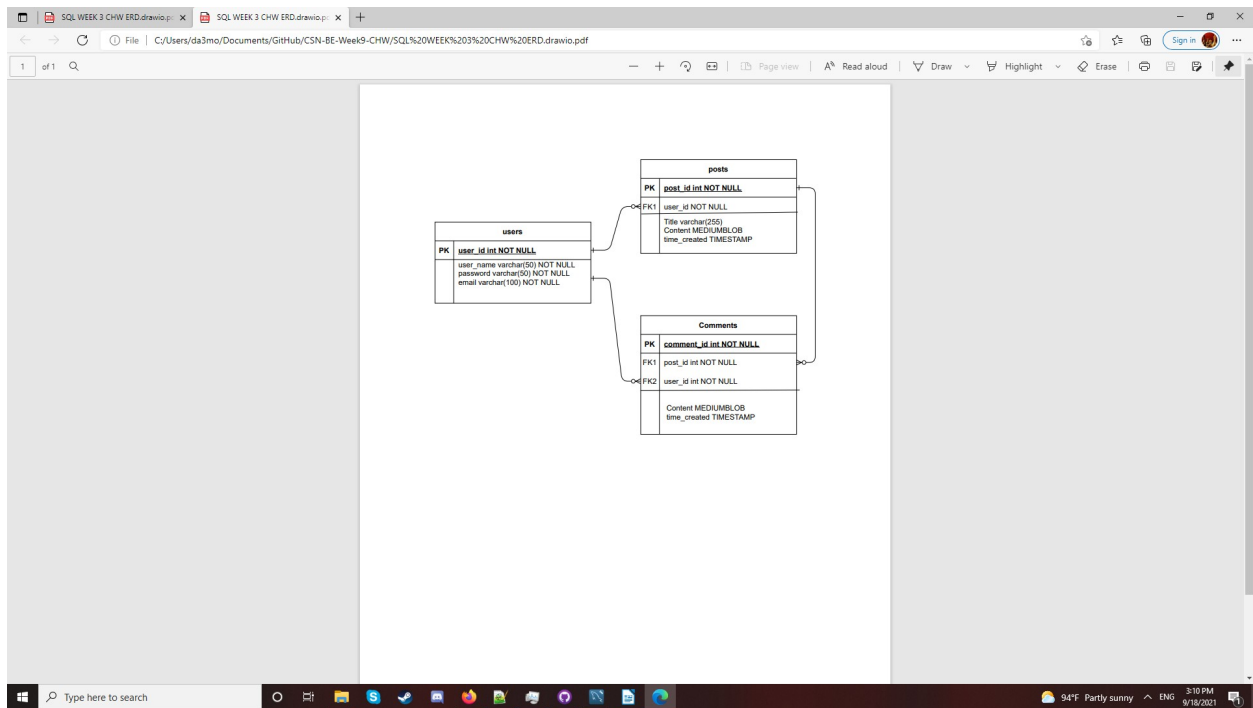
You will only need three tables.

Two tables will have foreign key references.

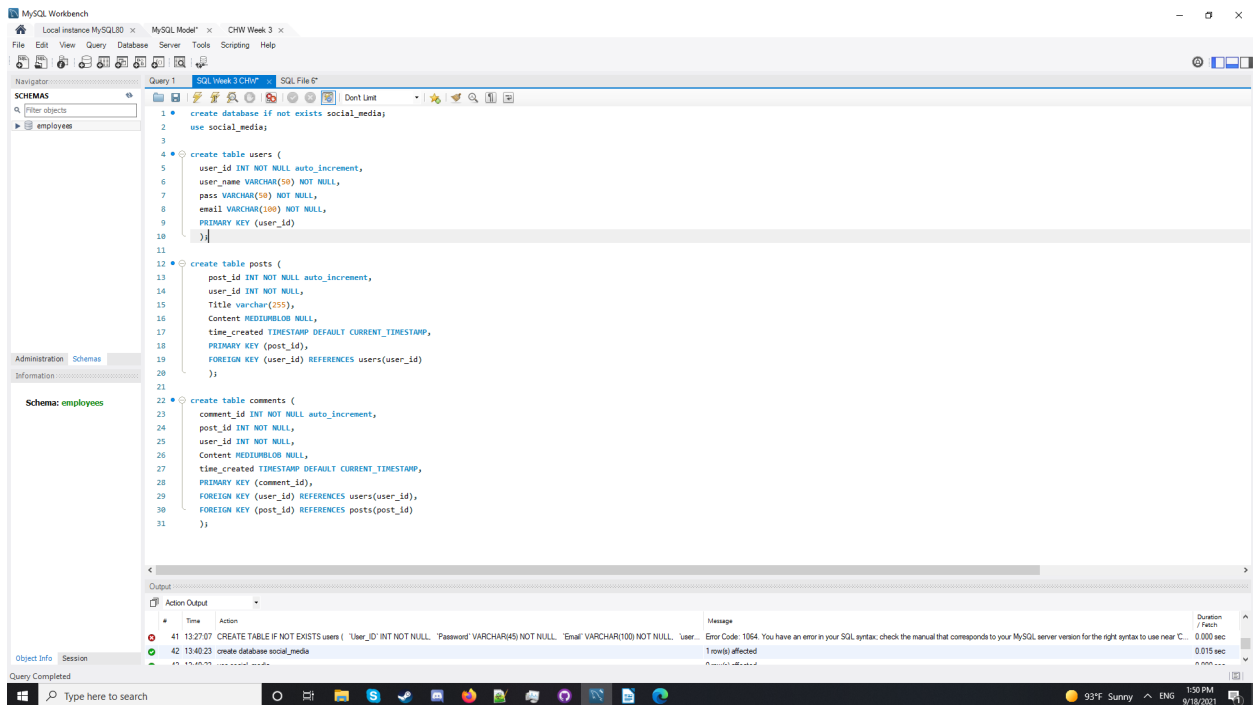
One table will have two foreign key references.

## Screenshots:

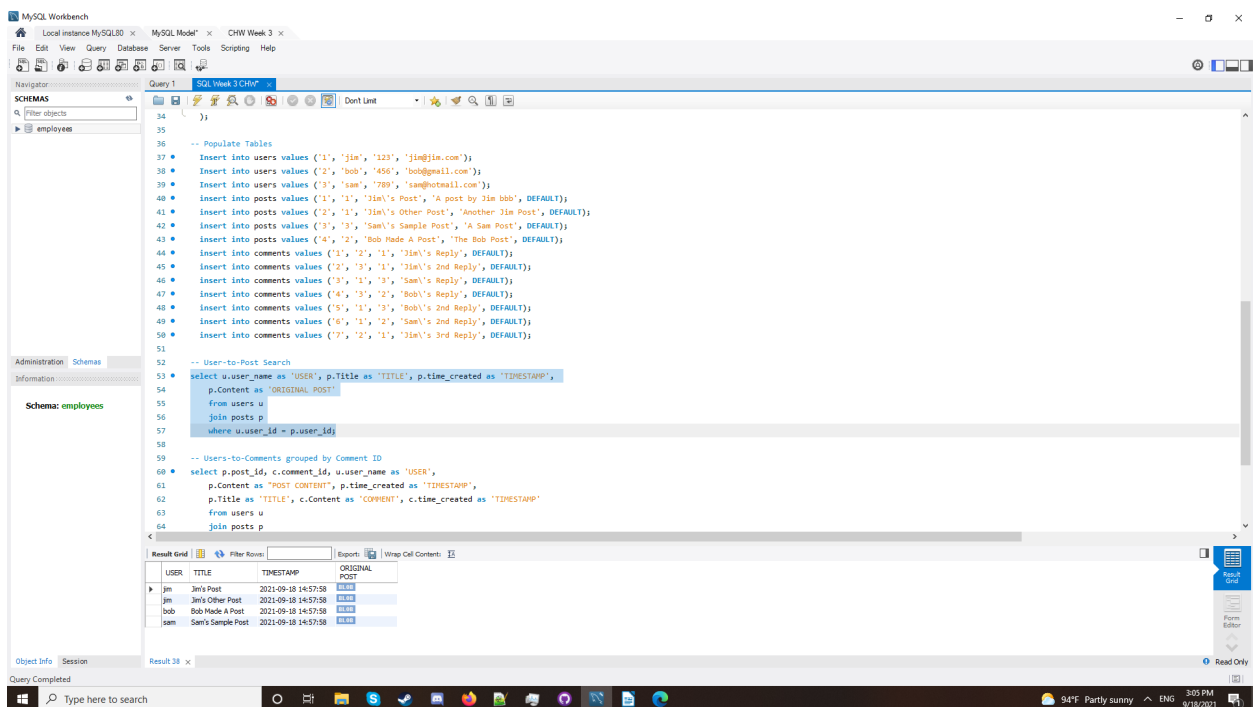
### Database ERD



## Database Creation,



## User-to-Post Search (and Database Population)



## User-to-Comment-in-Post, grouped by Comment ID

The screenshot shows the MySQL Workbench interface. The SQL editor contains a query that inserts data into the 'comments' table and then selects data grouped by comment ID. The results grid shows the output of the query.

```
47 • insert into comments values ('4', '3', '2', 'Bob's Reply', DEFAULT);
48 • insert into comments values ('5', '1', '3', 'Bob's 2nd Reply', DEFAULT);
49 • insert into comments values ('6', '1', '2', 'Sam's 2nd Reply', DEFAULT);
50 • insert into comments values ('7', '2', '1', 'Jim's 3rd Reply', DEFAULT);
51
52 -- User-to-Post Search
53 • select u.user_name as 'USER', p.title as 'TITLE', p.time_created as 'TIMESTAMP',
54       p.content as 'ORIGINAL POST'
55       from users u
56       join posts p
57       where u.user_id = p.user_id;
58
59 -- Users-to-Comments grouped by Comment ID
60 • select p.post_id, c.comment_id, u.user_name as 'USER',
61       p.content as 'POST CONTENT', p.time_created as 'TIMESTAMP',
62       p.title as 'TITLE', c.content as 'COMMENT', c.time_created as 'TIMESTAMP'
63       from users u
64       join posts p
65       join comments c
66       where c.user_id = p.user_id and p.user_id = u.user_id
67       and u.user_id = c.user_id group by c.comment_id;
68
69
```

post_id	comment_id	USER	POST CONTENT	TIMESTAMP	TITLE	COMMENT	TIMESTAMP
1	1	Jim	Jim's Post	2021-09-18 14:57:58	Jim's Post		2021-09-18 14:57:58
1	2	Jim	Jim's Post	2021-09-18 14:57:58	Jim's Post		2021-09-18 14:57:58
1	7	Jim	Jim's Post	2021-09-18 14:57:58	Jim's Post		2021-09-18 14:59:30
4	4	Bob	Bob Made A Post	2021-09-18 14:57:58	Bob Made A Post		2021-09-18 14:57:58
4	6	Bob	Bob Made A Post	2021-09-18 14:57:58	Bob Made A Post		2021-09-18 14:57:58
3	3	Sam	Sam's Sample Post	2021-09-18 14:57:58	Sam's Sample Post		2021-09-18 14:57:58
3	5	Sam	Sam's Sample Post	2021-09-18 14:57:58	Sam's Sample Post		2021-09-18 14:57:58

## URL to GitHub Repository:

<https://github.com/JDu8Du8/CSN-BE-Week9-CHW>