

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:

The screenshot shows the MySQL Workbench interface with the 'Schemas' tab selected. The 'FelixGram' database is selected in the left sidebar. The SQL editor contains the following code:

```
1 -- Drop DATABASE IF EXISTS FelixGram;
2 -- CREATE DATABASE FelixGram;
3 -- USE FelixGram;
4
5 * CREATE table user(
6   user_id INT NOT NULL AUTO_INCREMENT,
7   username VARCHAR(25) NOT NULL,
8   email VARCHAR(25) NOT NULL,
9   password VARCHAR(25) NOT NULL,
10  birth_day VARCHAR(25) NOT NULL,
11
12  PRIMARY KEY(user_id)
13 );
14
15 * CREATE table posts(
16   posts_id INT(20) NOT NULL AUTO_INCREMENT,
17   user_id INT(20) NOT NULL,
18   posttimestamp TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
19   posts VARCHAR(20) NOT NULL,
20
21  PRIMARY KEY(posts_id),
22  FOREIGN KEY(user_id) REFERENCES user(user_id)
23 );
24
```

The 'Action Output' tab at the bottom shows the execution results:

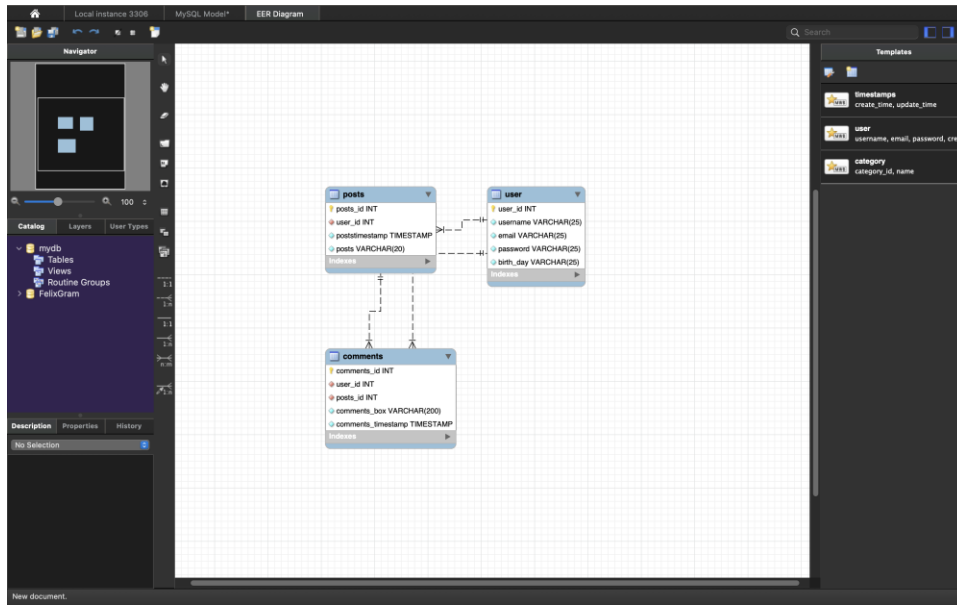
Time	Action	Response	Duration / Fetch Time
13:52:01	show databases	6 row(s) returned	0.00060 sec / 0.000...
13:52:29	SELECT * from employees LIMIT 0, 1000	0 row(s) returned	0.0036 sec / 0.0000...
13:53:25	SELECT * from employees not NULL	Error Code: 1064. You have an error in your SQL syntax; check the manual that c...	0.00019 sec
13:54:10	create database FelixGram	1 row(s) affected	0.0007 sec
13:54:29	create database FelixGram	Error Code: 1007. Can't create database 'FelixGram'; database exists	0.0010 sec
16:37:26	CREATE table user(user_id INT NOT NULL AUTO_INCREMENT, username VARCHAR(2...	0 row(s) affected	0.052 sec
16:47:55	CREATE table posts(posts_id INT(20) NOT NULL AUTO_INCREMENT, user_id INT(20)...	0 row(s) affected, 2 warning(s): 1681 Integer display width is deprecated and wll...	0.016 sec
17:01:47	CREATE table comments(comments_id INT(16) NOT NULL AUTO_INCREMENT, user_id...	0 row(s) affected, 3 warning(s): 1681 Integer display width is deprecated and wll...	0.012 sec

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20   posts VARCHAR(20) NOT NULL,
21
22  PRIMARY KEY(posts_id),
23  FOREIGN KEY(user_id) REFERENCES user(user_id)
24 );
25
26
27 * CREATE table comments(
28   comments_id INT(15) NOT NULL AUTO_INCREMENT,
29   user_id INT(15) NOT NULL,
30   posts_id INT(15) NOT NULL,
31   comments_box VARCHAR(200) NOT NULL,
32   comments_timestamp TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,
33
34  PRIMARY KEY(comments_id),
35  FOREIGN KEY(posts_id) REFERENCES posts(posts_id),
36  FOREIGN KEY(user_id) REFERENCES user(user_id)
37 );
38
39
```

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URL to GitHub Repository:

<https://github.com/Framos22/MySQLWeekThreeAssignment>