Relational Databases with MySQL Week 3 Coding Assignment
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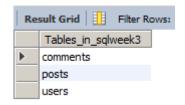
Screenshots:

```
sqlWeek3_Johnson_David* ×
Coding_Assignment_sqlWeek1_...
                           Coding_Assignment_sqlWeek2_...
 - | 🚖 | 🥩 🔍 🗐 🗊
         -- Create our Database let the character set defualt
         CREATE DATABASE IF NOT EXISTS sqlWeek3;
  2 •
        use sqlWeek3;
  3 •
        select database();
        show tables;
         -- Create User table
  7 • ⊖ CREATE TABLE IF NOT EXISTS users (
        user id INT AUTO INCREMENT PRIMARY KEY,
        username VARCHAR(255) NOT NULL,
  9
        password VARCHAR(255) NOT NULL,
 10
        email VARCHAR(255) NOT NULL );
 11
         -- Create Post table
 13
         -- Posts are being limited to 16K of text. If graphics were desired would change to a BLOB
         -- Post_data , as Text type, is being cached outside the in memory DB
 14
         -- If a user is deleted all their posts are deleted as well
 15
 16 • ⊝ CREATE TABLE IF NOT EXISTS posts (
         post_id INT AUTO_INCREMENT PRIMARY KEY,
 17
        user id INT NOT NULL,
 18
 19
        created date TIMESTAMP DEFAULT CURRENT TIMESTAMP,
 20
        post_data TEXT,
        FOREIGN KEY (user_id)
 21
 22
                REFERENCES USERS (user_id)
                ON UPDATE CASCADE ON DELETE CASCADE );
 23
 24
         -- Create Comments table
         -- Comments are being limite to 16K of text as well (see post table comments)
 25
 26
         -- If a post is deleted all the comments are deleted as well, a comment may be orphaned by a user
         -- Application logic resets the comment id sequence for new posts.
 28 • ⊖ CREATE TABLE IF NOT EXISTS comments (
         comment id INT AUTO INCREMENT,
 29
        post id INT NOT NULL,
 30
 31
        user_id INT ,
        created_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
 32
        comment_data TEXT,
 33
        PRIMARY KEY (comment_id , post_id),
         FOREIGN KEY (user_id)
 35
                REFERENCES USERS (user_id)
 36
 37
                ON UPDATE CASCADE ON DELETE SET NULL );
 38 •
         Show tables;
 39 •
         desc users;
 40 •
         desc posts;
 41 •
        desc comments;
         -- Student Note : Due to some install problems the ENGINE types do not match
 42
         -- To display the foreign key relations need to query the constraints table
 43
        select * from information schema.referential constraints where constraint schema = 'sqlweek3';
```

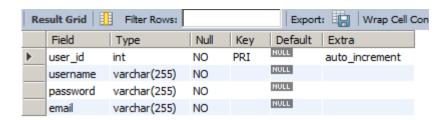
Results of running main script:



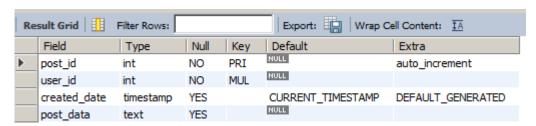
show tables;



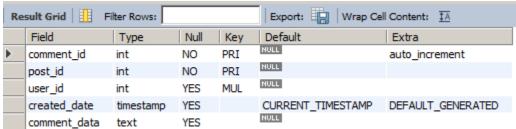
desc users;



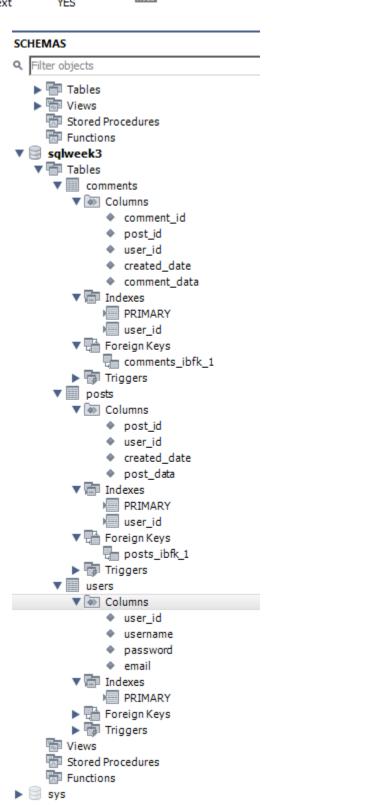
desc posts;



desc comments;



Schema View of result of running main script.



 $/\!/\, Student\ note: due\ to\ an\ Engine\ mismatch\ verified\ foreign\ key\ from\ the\ schema$

// constraints table

select * from information_schema.referential_constraints where constraint_schema = 'sqlweek3';



URL to GitHub Repository:

https://github.com/david2joh/sqlweek3.git