**Lab 3 Assignment**

**Due: Friday October 30, 2020 at 11:00pm on Brightspace (no late labs accepted)**

**For this lab, you will:**

You will create the database PictureGram.

**What will you submit:**

A zipped file called Lab3 that contains two files: Lab3 checklist of the tasks (checklist provided) and a database dump file (instructions at the end on how to create a .sql file).

**Instructions:**

Create the three database tables using PHPMYADMIN and fill the tables using the files from A2 (post text files, imagefile names, and comment text). Note, instructions to save a database and also some SQL help is at the end of the lab.

**Table1: Users**

This table will hold the name of all the users of the system (this would include "you" as the main user of your Picturegram and all other users of the application). About is a short description of the user. **There will only be one user (owner) as in the user table for now, since there is no login to determine who is the user of the account.**

There are 4 attributes: UserID, Name, About, AboutImage (the file name of the image for the About page). Note, store the image file name and then upload the image file (see Figure 1 for the setup of this Table).

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| 1. UserID    * Type: integer (11)    * Set up as the primary key    * Must be set to auto increment starting at 1    * Must not be null 2. Name    * Must be VARCHAR (100)    * Must not be null. | 1. About    * Must be text    * Must not be null 2. About Image    * Must be VARCHAR(50)    * Must not be null |

Figure 1a) Set up of the Users Table (PHPMyAdmim)

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Figure 1b) Sample input in the Users Table (note, only UserID 1 will be used in this assignment)

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**Table 2: Posts**

This table will hold information related to the posts that users make, including a PostID, the UserID of who made the post, the PostImage file name, the date of the post (using a timestamp), the text of the post (Post). (see Figure 2 for an example of the setup of this Table and with a few sample entries).

There are 6 attributes: PostID, UserID, Title, ImageFName, Post, and Date

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| 1. PostID    * Type: integer (11)    * Set up as the primary key    * Must be set to auto increment starting at 1    * Must not be null 2. UserID    * Type: integer (11)    * Set up as foreign key - links to UserID in Users Table. index the attribute and then you can add the foreign key (if using PHPMyAdmin)    * Must not be null 3. PostImage    * Must be VARCHAR(50)    * Must not be null | 1. Post    * Must be Type: Text    * Must not be null 2. Date    * Type: timestamp    * Must not be null    * Default: current\_Timestamp    * Should update when create a post automatically (this is in PHPMyAdmin under extra - set to updateCurrent\_timestamp    * Note, this sets it UTF – so translate to the local timezone[date\_default\_timezone\_set('America/Halifax');] in your PHP code when displaying on the appropriate page. |

Figure 2a) Set up of the Posts Table (PHPMyAdmim)

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Figure 2b) Sample input in the Posts Table (Use the text from files from A2 to fill in Posts (as test data).

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**Table 3: Comments**

The Comments table records the Comments made on each Post (as well as the User who made it although for this assignment this will always be set to UserID 1 – since we are not dealing with the multiple users yet). There are five attributes: CommentID, PostID, UserID, Comment, and Date (see Figure 3a and Figure 3b for an example of the setup of this Table and with sample entries. Again, you can use the files from A2 to fill this table).

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| 1. CommentID    * Type: integer (11)    * Set up as the primary key    * Must be set to auto increment starting at 1    * Must not be null 2. UserID    * Type: integer (11)    * Set up as a foreign key (that links to UserID in Users Table) – you will need to index the attribute and then you can add the foreign key (if using PHPMyAdmin)    * Must not be null 3. PostID    * Type: integer (11)    * Set up as a foreign key (link to PostID in Posts Table) – index the attribute and then you can add the foreign key (if using PHPMyAdmin)    * Must not be null | 1. Comment    * Must be Type: Text    * Must not be null 2. Date    * Type: timestamp    * Must not be null    * Default: current\_Timestamp    * Should update when create a post automatically (in PHPMyAdmin under extra it should be set to updateCurrent\_timestamp    * Note, this sets it UTF – so you will need to translate to the local timezone [date\_default\_timezone\_set('America/Halifax');] in your PHP code when displaying on the appropriate page. |

Figure 3a) Set up of the Comments Table (PHPMyAdmim)

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Figure 3b) Sample input in the Comments Table (Use the files from A2 to fill the comments for each post. Note, you will need to open each comment file and manually (add copy/paste) each comment in the file to the table).

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**Instructions to create a database dump/save a database (using PHPMYADMIN)**

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| 1. Open MAMP and click Tools and then PHPMYADMIN   Graphical user interface, text, application  Description automatically generated |
| 1. Select the PictureGram database on the right panel and select Export on the top navigation bar   Graphical user interface, text, application, email  Description automatically generated |
| 1. Select Quick and make sure that SQL is showing and Press GoGraphical user interface, text, application, email     Description automatically generated |
| 1. This will bring up your Save window (on a Mac). Or it may bring up a window with text (all your tables in SQL code). Copy it to a text editor and save it PictureGram.sql. If you are in this situation – watch <https://www.youtube.com/watch?v=cbmaA0hpDbY> for exporting Database   Graphical user interface, application, email  Description automatically generated |

**Some SQL hints:**

**Create a Database in PHPMYADMIN**

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**To Create a Table with a Primary Key and Auto\_Increment a value (examples)**

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After selecting the SQL and you can write your SQL queries e.g., CREATE TABLE

\*StdID is the primary key and will automatically create an unique value starting at 1 (and not null)

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**Create a Table with a Foreign Key/s (example)**

**Graphical user interface, text, application, email

Description automatically generated**

**Adding Content to your Tables (Posts Table)**

Graphical user interface

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Press Go

Foreign Key – select

Primary key – leave blank

Select the table you want to enter data into in. Then select Insert on the top navigation bar. For Primary keys (e.g., PostID) do not add anything (leave the value empty – it will be generated automatically). For Foreign keys (e.g., UserID) use the drop-down box and select the correct value. For dates that are automatically created – you don't need to add anything. You can cut and paste the text for the post and image filed. Once you have added everything press Go. It will be added to the table.

**Updating/Editing data in tables (Posts Table)**

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Select the table with the data you want to change/edit and select Browse on the top nav bar. Check the row you want to edit and press Edit.

Graphical user interface

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Now you can update the text, date, etc. and Press Go to save the changes.