CMPS 3680 Guided Lab 5

Spring 2024

Part 1 - Setup

1. For this assignment you will start with your completed lab4, so I would recommend making a copy of it.
2. To do this, run the following command from inside your cs3680 folder:

```
cp -r lab4/ lab5/
cd lab5/
```

3. Next, make a new folder inside of your lab5 folder called sql:

```
mkdir sql
cd sql/
```

4. Finally, use the following command to create the needed files inside of your sql/ folder:

```
touch config.php sqlTools.php create.php drop.php
```

5. The `config.php` file will contain the follow (with your sql credentials):

```php
<?php
$servername = 'localhost';
$username = 'your_username';
$password = 'your_password';
$dbname = 'your_database';
?>
```

Part 2 - sqlTools.php

1. Use `require_once` to include the `config.php` file in this file.
2. Define the function `getConnection()` to do the following:
   a. Use `mysqli_connect` to obtain a valid connection (`$conn`) using your credentials from `config.php`
      To access the variables from `config.php` inside of getConnection, use the `global` keyword, the `$GLOBALS` associative array, or make `getConnection` an arrow function.
   b. If `$conn` is invalid (false) use `die()` to throw an error, otherwise, return `$conn` from `getConnection()`
3. Define the function `closeConnection($conn)` to do the following:
   a. Use `mysqli_close($conn)` to close the database connection for the provided `$conn` object
   b. If the close fails, use `die()` to throw an error.

Part 3 - create.php

This will be a simple one off php script we can run from the command line to create our products table

1. Use `require_once` to include sqlTools.php in this file.
2. Call `getConnection` to get a valid sql connection
3. Use heredoc to create the following query string:

```
CREATE TABLE product (
    id int unsigned NOT NULL auto_increment,
    internalId varchar(20) NOT NULL,
    name varchar(255) NOT NULL,
    vendor varchar(255) NOT NULL,
    vendorPhone varchar(20) NOT NULL,
    quantity mediumint NOT NULL,
    lastPurchased datetime,
    createdAt datetime DEFAULT NOW(),
    updatedAt datetime ON UPDATE NOW(),
    PRIMARY KEY (id)
);
```

4. Call `mysqli_query` to execute the query string and create the table.
   a. If the query was successful, echo a message.
   b. If the query failed, use die to print the `mysqli_error`
5. Call `closeConnection`

Part 4 - drop.php

This will be a simple one off php script we can run from the command line to drop our products table

1. Use `require_once` to include sqlTools.php in this file.
2. Call `getConnection` to get a valid sql connection
3. Call `mysqli_query` to execute the query string 'DROP TABLE product;'
   a. If the query was successful, echo a message.
   b. If the query failed, use die to print the `mysqli_error`
4. Call `closeConnection`