CSC 436 Spring 2015 Database Management Systems



streamTV Final Submission 21 April 2015 David V Iacono

streamTV Final Submission

The Joy of Programming

I really enjoyed completing this project. I learned a lot about HTML, SQL, and PHP. I have to say that PHP was very frustrating to work with. PHP is very particular about how you sequence the PHP code and the HTML code. I received many errors in the beginning.

However, I think that I won't run into those common errors in the future. I think I had some growing pains with the language. I had very limited knowledge and experience with markup languages.

Code Standards

When I originally reviewed the Kids Toys example PHP code, it was very difficult to read and see what was going on with the code. It was not apparent which code standards the HTML and PHP was formatted in. I searched the internet for recommended code standards. I stumbled upon the Fellowship Technologies Code Standards which can be found here.

http://developer.fellowshipone.com/patterns/code.php.

This helped establish indenting structure for the document. I set the indentation to tab, with length 4 spaces. I then aligned all of the code blocks per the Fellowship Technologies Code Standards. HTML is much easier to learn when it is formatted properly.

Documentation

Overall, the code is very well documented. Having properly indented the code, I was able to structure the comments very nicely. The comments are easy to read and form a useful narrative for the code.

Code Reuse

I borrowed code from almost every PHP file provided by Dr. DiPippo. Code seems like it made use of a previous version PHP. I had header errors, issues tracking session IDs, and issues connecting to the database.

Link to the Home Page

This is the link to the homepage: http://diacono.vps.cs.uri.edu/streamTV/streamtv.php

The only difference is that I'm using Calibri font instead of Times New Roman. I really despise Times New Roman. It has a very uninteresting Internet Explorer / Microsoft Windows feel.

```
ACTORINFO.PHP
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       Display information regarding an actor.
-->
<html>
       <body style="font-family:'Calibri'">
               <!-- Header used for all pages on the site -->
               <center>
                              <b>
                                      <font size=+4>
                                             <a href="streamtv.php">
                                                     streamTV
                                             </a>
                                      </font>
                              </b>
                              <hr WIDTH="100%"></hr>
               </center>
               <!-- PHP to return the Actor information -->
               <?php
                      //Connect to the Database
                      include 'connect.php';
                      //Get Parameters from the URL
                      $actID = $_GET['actorID'];
                      $name = $_GET['actorName'];
                      echo "<b>The actor you selected:</b>$name";
                      //Query for the Main Cast
                      $query =
                                      "SELECT S.showID, title, role
                                             FROM SHOWS S, MAIN_CAST M
                                             WHERE S.showID = M.showID AND actID = ?";
                      //Prepare the SQL Statement
                      if(!$stmt=mysqli_prepare($link,$query)){
                              die("Error in query");
                      }
                      //Place $actID into the ? marker
                      mysqli stmt bind param($stmt, "s", $actID);
```

```
//Execute the Query Statement
                       mysqli stmt execute($stmt);
                       //Bind the Result Set into variables $showID $sTitle and $role
                       mysqli_stmt_bind_result($stmt,$showID,$sTitle,$role);
                       //Store the Result in order to get the Row count
                       mysqli_stmt_store_result($stmt);
                       //Get the Number of rows in the result set
                       $rows = mysqli_stmt_num_rows($stmt);
                       //Display Result List
                       echo "<u><b>Main Cast:</b></u><br>";
                       //If the query returns with information,
                       if($rows != 0){
                               //print the Main Cast
                              while(mysqli_stmt_fetch($stmt)){
                                      echo"<br><a
href='showinfo.php?showID=$showID'>$sTitle</a> as <i>$role</i>";
                              }
                       }
                       //Echo that it didn't find anything
                       else{
                               echo "$name is not in the Main Cast of any shows";
                       }
                       //Close the statement before beginning next query
                       mysqli_stmt_close($stmt);
                       //Retrieve the Main Cast
                                      "SELECT S.showID, title, role
                       $query =
                                              FROM SHOWS S, RECURRING CAST R
                                              WHERE S.showID = R.showID AND actID = ?
                                              GROUP BY role";
                       //Prepare the Statement
                       if(!$stmt=mysqli_prepare($link,$query)){
                               die("Error in Query");
                       }
                       //set #actID as ? marker
                       mysqli stmt bind param($stmt, "s", $actID);
                       //Execute the Query statement
```

```
mysqli_stmt_execute($stmt);
                       //Bind the Result Set into variables $showID $sTitle and $role
                       mysqli_stmt_bind_result($stmt, $showID, $sTitle, $role);
                       //Store the result in order to get the row count
                       mysqli_stmt_store_result($stmt);
                       //Get the Number of Rows in the result set
                       $rows = mysqli_stmt_num_rows($stmt);
                       //Display the Guest Cast title
                       echo "<b><u>Guest Cast:</u></b><br>";
                       //If the query returns a value
                       if($rows != 0){
                               //Display all results from the query
                               while(mysqli_stmt_fetch($stmt)){
                                       echo"<br><a
href='showinfo.php?showID=$showID'>$sTitle</a> as <i>$role</i>';
                       }
                       //Otherwise State that we found nothing
                       else{
                               echo "$name is not in the guest cast of any shows";
                       //close the statement
                       mysqli_stmt_close($stmt);
                       //close connection to the DB
                       mysqli_close($link);
               ?>
        </body>
</html>
```

```
ALL_SEARCH.PHP
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       Receives actor or show post data from streamtv.php.
-->
<html>
       <!-- Header used for all pages on the site -->
        <center>
               <b>
                       <font size=+4>
                               <a href="streamtv.php">
                               streamTV
                               </a>
                       </font>
               </b>
               <hr WIDTH="100%">
        </center>
        <body style="font-family:'Calibri'">
               <!-- PHP -->
               <?php
                       //require the connect.php file to connect to the database.
                       require_once "connect.php";
                       $allSearch = $_POST['newSearch'];
                       echo "Search Results for: $allSearch";
                       //Create the wildcard search string for the query
                       $allSearch = '%'.$allSearch.'%';
                       //Create the query string with marker for the search string
                       $query =
                                       "SELECT showID, title
                                               FROM SHOWS
                                               WHERE (title LIKE ?)";
                       //Prepare the query statement
                       if ($stmt = mysqli_prepare($link, $query)){
                               //Bind the parameter $tsrch to the ? marker in the guery string
                               mysgli stmt bind param($stmt, 's', $allSearch);
```

```
//Execute the guery statement
                               mysqli stmt execute($stmt);
                               //Bind the result to the variables $name, $showID
                               mysqli_stmt_bind_result($stmt, $showID, $title);
                               //Store the result so we can get the number of rows
                               mysqli_stmt_store_result($stmt);
                               //Find out how many rows in the result
                               $rows = mysqli stmt num rows($stmt);
                               echo "<br/>srows Shows match the search<br/>';
                               if ($rows > 0){
                                      //Loop through the rows of the result and print
                                      while (mysqli_stmt_fetch($stmt)){
                                              echo "<a href =
'showinfo.php?showID=$showID'>$title</a>";
                               }
                               else{
                                       echo "No Shows match<br>";
                               }
                       }
                       //Close the statement
                       mysqli_stmt_close($stmt);
                       //And Search Again for Actors
                       //Create the wildcard search string for the query
                       $allSearch = '%'.$allSearch.'%';
                       //Create the query string with marker for the search string
                                      "SELECT CONCAT(fname, ' ', Iname), actID
                       $query =
                                              FROM ACTOR
                                              WHERE (CONCAT(fname, ' ', Iname) LIKE ?)";
                       //Prepare the query statement
                       if ($stmt = mysqli_prepare($link, $query)) {
                               //Bind the parameter $tsrch to the ? marker in the query string
                               mysqli_stmt_bind_param($stmt, 's', $allSearch);
                               //Execute the guery statement
                               mysqli_stmt_execute($stmt);
                               //Bind the result to the variables $name, $actID
                               mysqli stmt bind result($stmt, $name, $actID);
```

```
//Store the result so we can get the number of rows
                              mysqli_stmt_store_result($stmt);
                              //Find out how many rows in the result
                              $rows = mysqli_stmt_num_rows($stmt);
                              echo "<br>>p>$rows Actors match the search<br>";
                              //If the list has elements, print them
                              if ($rows > 0) {
                                      //Loop through the rows of the result and print
                                      while (mysqli_stmt_fetch($stmt)) {
                                             echo "<a href =
'actorinfo.php?actorID=$actID&actorName=$name'>$name</a>";
                              }
                              else{
                                      echo "No Actors match<br>";
                              }
                      }
                      //Close the statement
                      mysqli_stmt_close($stmt);
                      //Close the connection
                      mysqli_close($link);
       </body>
</html>
```

```
CHECK_LOGIN.PHP
<?php
       //Author: David Iacono
       //CSC 436 Database Management Systems
       //Spring 2015 DiPippo
       //Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       //This PHP class checks the login information to verify the customer's credentials
       //Create session
       session_start();
       //Collect session and post tokens
       $session_token = $_SESSION['token'];
       $post_token = $_POST['token'];
       //Compare session and post tokens
       if($session_token != $post_token) {
               die("Token mismatch");
       }
       //Retrieve username and password from post
       $uname = $ POST['uname'];
       $pword = $_POST['pword'];
       //Hash the password
       $hash_pword = md5(uniqid($pword, TRUE));
       //Connect to the database
       include 'connect.php';
       //Retrieve the customer ID from the database with the given username
       //Create query string to look up password
       $query = "SELECT password, custid
            FROM CUSTOMER
           WHERE username = ?";
       //Prepare the query statement
       if (!$stmt = mysqli_prepare($link, $query)) {
               die("Error in query");
       }
       //Bind the parameter $uname to the ? marker in the guery string
       mysqli_stmt_bind_param($stmt, 's', $uname);
       //Execute the query statement
       mysqli stmt execute($stmt);
```

```
//Bind the result to the variables $retrievedPwd and $cnum
        mysqli_stmt_bind_result($stmt, $retrievedPwd, $cnum);
       //If no result returned from database, redirct to login page
       if(!mysqli_stmt_fetch($stmt)){
               header('Location: login.php');
       }
       //Verify password using php function
       $valid = password_verify($hash_pword, $retrievedPwd);
       //Compare the hashed passwords
       if(!$hash pword === $retrievedPwd){
               //Incorrect password. Redirect to login_form.
               $_SESSION['cnum'] = "";
               header('Location: login.php');
       }
       else {
               //Redirect to home page after login.
               //Set session variable cnum to the customer number collected from the query
               $_SESSION['cnum'] = $cnum;
               header('Location: streamtv.php');
       }
       //Close the SQL stream
       mysqli_close();
?>
```

```
CONNECT.PHP

<?php

//Author: David Iacono

//CSC 436 Database Management Systems

//Spring 2015 DiPippo

//Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php

//Connect to the private connect
include "/home/diacono/private/real_connect.php";
?>
```

```
CUST_QUEUE.PHP
<?php
       //Author: David Iacono
       //CSC 436 Database Management Systems
       //Spring 2015 DiPippo
       //Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       //This PHP class shows the customer's show queue.
       //Create session
       session_start();
       //If the session varaible csnum is set, store the variable. Otherwise
       //store empty customer number.
       //This page is only accessible if customer is logged in.
       if(isset($_SESSION['cnum'])){
               $cnum = $_SESSION['cnum'];
       }
       else{
               $cnum = "";
       }
?>
<!-- Header used for all pages on the site -->
<html>
       <center>
               <h>>
                       <font font = 'Calibri' size=+4>
                               <a href="streamtv.php">
                                      streamTV
                               </a>
                       </font>
               </b>
               <hr WIDTH="100%">
       </center>
       <body style="font-family:'Calibri'">
       </body>
</html>
<!-- Display Shows that have been queued by the customer -->
<?php
       // Include the connect.php file to connect to the database.
       include 'connect.php';
       //Create the query for user information
                       "SELECT CONCAT(fname, '', Iname), email
       $query =
```

```
FROM CUSTOMER
                       WHERE custID = ?";
//Prepare the query statement
if(!$stmt = mysqli prepare($link, $query)){
       die("Error in query.");
}
//Bind the parameter $cnum to the ? marker in the query string
mysgli stmt bind param($stmt, 's', $cnum);
//Execute the query statement
mysqli_stmt_execute($stmt);
//Bind the result to the variables $name, $email
mysqli_stmt_bind_result($stmt, $name, $email);
if(mysqli_stmt_fetch($stmt)){
       echo "TV Show Information For $name<br>$email";
}
else{
       echo "ERROR FETCHING INFO";
}
mysqli_stmt_close($stmt);
//Create the query string with marker for custID
$query = "SELECT title, Q.showID, datequeued
                       FROM CUST_QUEUE Q, CUSTOMER C, SHOWS S
                       WHERE C.custID = Q.custID AND
                                      S.showID = Q.showID AND
                                      C.custID = ?";
//Prepare the query statement
if(!$stmt = mysqli prepare($link, $query)){
       die("Error in query");
}
//Bind the parameter $cnum to the ? marker in the query string
mysqli_stmt_bind_param($stmt, 's', $cnum);
//Execute the query statement
mysqli_stmt_execute($stmt);
//Bind the result to the variables $showTitle, $showID, $dateQueued
mysqli stmt bind result($stmt, $showTitle, $showID, $dateQueued);
//Store the result so we can get number of rows
```

```
mysqli_stmt_store_result($stmt);
      //Get the number of rows in the result
      $rows = mysqli_stmt_num_rows($stmt);
      if($rows > 0){
            //Create a table to display the results
            echo "streamTV Queue:<br>";
            echo "SHOW TITLEDATE QUEUEDLIST
WATCHED EPISODES";
            //Display result set
            while (mysqli_stmt_fetch($stmt)) {
                   echo "<a href =
'showinfo.php?showID=$showID'>$showTitle</a>$dateQueued";
                   echo "<a href =
'watched_info.php?showID=$showID&title=$showTitle&name=$name'><b>X</a>";
            echo "";
      }
      else{
            //No shows queued
            echo "No shows Queued.<br>";
      }
      //Close the statement
      mysqli_stmt_close($stmt);
      //Close the database link
      mysqli_close($link);
?>
```

```
EPISODEINFO.PHP
<?php
       //Create session
       session_start();
?>
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       Display episode information
-->
<html>
       <!-- Header used for all pages on the site -->
       <center>
               <h>>
                       <font size=+4>
                               <a href="streamtv.php">
                                      streamTV
                               </a>
                       </font>
               </b>
               <hr WIDTH="100%"></hr>
       </center>
       <body style="font-family:'Calibri'">
               <!-- Title of the page -->
               <b class="newStyle1">The television show you searched for: </b>
               <?php
                       //Include the connect.php file for connections to the database.
                       include 'connect.php';
                       //Get post data for showID and episodeID
                       $showID = $_GET['showID'];
                       $episodeID = $_GET['episodeID'];
                       //Create the query as a string with markers for showID and episodeID
                       $query =
                                      "SELECT S.title, E.title, airdate
                                              FROM SHOWS S, EPISODE E
                                              WHERE S.showID=E.showID AND E.showID=? AND
E.episodeID=?";
                       //Set up the sql statement
```

```
if($stmt = mysqli_prepare($link, $query)){
                              //Bind the parameter $showID and $episodEID to the ? markers in the
query string
                              mysqli_stmt_bind_param($stmt, 'ss', $showID,$episodeID);
                              //Execute the query statement
                              mysqli_stmt_execute($stmt);
                              //Bind the result to the variables $showTitle,$episodeTitle,$airDate
                              mysgli stmt bind result($stmt, $showTitle, $episodeTitle, $airDate);
                              //Get the result and print it
                              if(mysqli stmt fetch($stmt)){
                                      echo "<br>Show: <a
href='showinfo.php?showID=$showID'>$showTitle</a>
                                      <br>Episode: <i>$episodeTitle</i>
                                      <br>Original Air Date: $airDate";
                              }
                              else {
                                      echo "<br>Television Show not found";
                              }
                              //Close the statement
                              mysqli stmt close($stmt);
                      }
                      //Allow customer to view if loggedin
                      if($_SESSION['cnum'] != ""){
                              //Create the query to get the showID's from the customer's queue
                              echo "<a href =
'newwatched.php?showID=$showID&episodeID=$episodeID&showTitle=$showTitle&episodeTitle=$epis
odeTitle'>
                                             Watch This Episode</a>";
                      }
                      //Query for Main Cast
                      echo "<b>Main Cast:</b>";
                      $query =
                                      "SELECT CONCAT(fname, ' ',Iname), M.actID, role
                                             FROM MAIN CAST M, ACTOR A
                                             WHERE M.actID=A.actID AND showID=?
                                             ORDER BY Iname";
                      if($stmt = mysqli prepare($link, $query)){
                              //Bind the parameter $showID to the ? marker in the guery string
                              mysqli stmt bind param($stmt, 's', $showID);
                              //Execute the query statement
```

```
mysqli_stmt_execute($stmt);
                             //Bind the result to the variables $actorName,$actID,$actorRole
                              mysqli stmt bind result($stmt, $actorName,$actID,$actorRole);
                             //Get the result and print it
                              while(mysqli_stmt_fetch($stmt)){
                                     echo "<a href =
'actorinfo.php?actorID=$actID&actorName=$actorName'>$actorName </a>
                                                    as <i>$actorRole</i><br>";
                             }
                      }
                      //Close the statement
                      mysqli stmt close($stmt);
                      //Query for Recurring Cast
                      echo "<b>Episode Cast:";
                                     "SELECT CONCAT(fname, '',Iname), RECURRING CAST.actID,
                      $query =
role, COUNT(*)
                                             FROM RECURRING CAST, ACTOR
                                             WHERE RECURRING_CAST.actID=ACTOR.actID AND
showID=? AND episodeID=?
                                             GROUP BY CONCAT(fname, '',lname)
                                             ORDER BY Iname";
                      if ($stmt = mysqli_prepare($link, $query)) {
                             //Bind the parameter $showID,$episodEID to the ? markers in the guery
string
                              mysgli stmt bind param($stmt, 'ss', $showID, $episodeID);
                             //Execute the query statement
                              mysqli_stmt_execute($stmt);
                             //Bind the result to the variables
$actorName,$actID,$actorRole,$numAppeared
                              mysqli stmt bind result($stmt,
$actorName,$actID,$actorRole,$numAppeared);
                              mysqli_stmt_store_result($stmt);
                              $rows = mysqli_stmt_num_rows($stmt);
                              echo " ($rows)</b><br>";
                              if($rows > 0){
                                     //Display the results
                                     while(mysqli stmt fetch($stmt)){
                                             echo "<a href =
'actorinfo.php?actorID=$actID&actorName=$actorName'>$actorName</a>
```

```
LOGIN.PHP
<?php
       // Uses session to send token for CSRF verification
       // Start the session
       session_start();
       // Compute a token to be passed with this post form to guard against CSRF attack
       if (!isset($_SESSION['token'])) {
               $_SESSION['token'] = md5(uniqid(rand(), TRUE));
       }
       $token = $_SESSION['token'];
?>
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       Login form to allow customer to log into the system.
       Fill in form with username and password.
       Data sent to check_login.php using POST method.
-->
<html>
       <head>
               <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
               <title>Login Form</title>
       </head>
<body style="font-family:'Calibri'">
       <!-- Header used for all pages on the site -->
       <center>
               <b>
                       <font size=+4>
                               <a href="streamtv.php">
                                      streamTV
                               </a>
                       </font>
               </b>
               <hr WIDTH="100%">
       </center>
       <!-- Create login form -->
               <form id="form1" name="form1" method="post" action="check login.php">
                       <input type="hidden" name="token" value="<?php echo $token; ?>" />
```

```
LOGOUT.PHP
<?php
       //start session
       session_start();
       //Reset session variable cnum to empty and redirect to home page.
       $_SESSION['cnum'] = "";
       header('Location: streamtv.php');
?>
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       This class logs the user out of their session.
-->
<html>
       <head>
               <title>streamTV</title>
       </head>
</html>
```

```
NEWWATCHED.PHP
<?php
       //Start session
       session_start();
?>
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       This displays the watched shows
-->
<html>
       <body style="font-family:'Calibri'">
               <!-- Header used for all pages on the site -->
               <center>
                       <b>
                               <font size=+4>
                                      <a href="streamtv.php">
                                              streamTV
                                      </a>
                               </font>
                       </b>
                       <hr WIDTH="100%">
               </center>
               <?php
                       //Confirm session IDs match
                       if(isset($_SESSION['cnum'])){
                       $cID=$_SESSION['cnum'];
                       }
                       else{
                               $cID="";
                       }
                       //if not logged in, redirect to main page
                       if($cID==""){
                               header("Location: index.php");
                       }
                       else{
                               //connect to database to add as watched
                               include 'connect.php';
```

```
//get URL Parameters
                              $showID = $_GET['showID'];
                              $episodeID = $_GET['episodeID'];
                              $showTitle = $ GET['showTitle'];
                              $episodeTitle = $_GET['episodeTitle'];
                              $date= date("Y-m-d");
                              echo "Now watching <i><b>$showTitle</b></i>";
                              echo "<br>Episode: <i><b>$episodeTitle</b></i></br>";
                              //SQL statement for watched shows
                              $query =
                                             "INSERT INTO WATCHED (custID, showID, episodeID,
datewatched)
                                                     VALUES (?,?,?,?)";
                              //Prepare the statement
                              if(!$stmt = mysqli_prepare($link,$query)){
                                     die("Error in Query");
                              }
                              //Bind $cID,$showID,$episodeID,$date to ? markers
                              mysqli_stmt_bind_param($stmt,"ssss", $cID, $showID, $episodeID,
$date);
                              //Execute the Query Statement
                              mysqli_stmt_execute($stmt);
                              //close the Query
                              mysqli_stmt_close($stmt);
                              mysqli_close($link);
                      }
               ?>
               <iframe width="1280" height="720"
src="https://www.youtube.com/watch?v=dQw4w9WgXcQ" frameborder="0" allowfullscreen></iframe>
       </body>
</html>
```

```
QUEUESHOW.PHP
<?php
       //Author: David Iacono
       //CSC 436 Database Management Systems
       //Spring 2015 DiPippo
       //Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       session_start();
       //get the session information
       if(isset($_SESSION['cnum'])){
               $custID = $_SESSION['cnum'];
       }
       else{
               $custID = "";
       }
       //Gather URL Parameters
       $showID = $_GET['showID'];
       //If Customer is logged In, add the show to their Queue.
       //Otherwise, Redirect to main page to avoid error.
       if($custID == ""){
               header('Location: index.php');
       }
       else{
               //connect to database
               include 'connect.php';
               //set the date queued to todays date
               $dateQueued = date('Y-m-d');
               //String Query for Inserting into Queue
               $query =
                               "INSERT INTO CUST QUEUE (custID, showID, dateQueued)
                                      VALUES (?, ?, ?)";
               if(!$stmt = mysqli_prepare($link,$query)){
                       die("Error in Query");
               }
               //Replace ? markers with $custID $showID, and $dateQueued
               mysqli_stmt_bind_param($stmt,'sss',$custID,$showID,$dateQueued);
               //Execute the Query
               mysqli stmt execute($stmt);
               //after inserting has been completed, allow a hyperlink to the customer's queue
```

```
echo "Queue Update Successful! -- <a href = 'cust_queue.php'>View Queue</a>";
               //close the query
               mysqli_stmt_close($stmt);
               //close the connection to the database
               mysqli_close($link);
       }
?>
<center>
       <b>
               <font size=+4>
                      <a href="streamtv.php">
                              streamTV
                      </a>
               </font>
       </b>
       <hr WIDTH="100%">
</center>
```

```
REGISTER.PHP
<!--
Author: David Iacono
CSC 436 Database Management Systems
Spring 2015 DiPippo
Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
Registers new in database
<html>
       <head>
               <title>streamTV</title>
       </head>
       <body style="font-family:'Calibri'">
               <?php
                      //set membersince and renewaldates for the new user
                      //Today's date in YYY-MM-DD Format
                      $membersince = date("Y-m-d");
                      //Renewal Date in 1 year from Today.
                      $renewaldate = date('Y-m-d', strtotime('+1 year'));
                      //Hash the password to be stored securely in the database
                      //$hashed_pword = hash('sha256', $pword1);
                      $hash_pword = md5(uniqid($pword1, TRUE));
                      //Connect to the database
                      include 'connect.php';
                      //Create query string with marker for $uname
                                      "SELECT *
                      $query =
                                             FROM CUSTOMER
                                             WHERE username = ?";
                      //Prepare the query statement
                      if(!$stmt = mysqli_prepare($link, $query)){
                              die("Error in query");
                      }
                      //Bind the parameter $uname to ? marker in the query string
                      mysqli_stmt_bind_param($stmt, 's', $uname);
                      //Execute the query statement
                      mysqli_stmt_execute($stmt);
```

```
//Store the result so we can get number of rows
                      mysqli_stmt_store_result($stmt);
                      //Find out how many rows in the result
                      $rows = mysqli stmt num rows($stmt);
                      if ($rows != 0) {
                             //if username already exists, offer to try again to register or
                             //log in with existing username
                              echo "Username $uname already exists.
                               Register with a new username: <a href=
'registration.php'>REGISTER</a>
                              href='login.php'>LOGIN</a>";
                              //Close statement
                              mysqli_stmt_close($stmt);
                      }
                      else{
                             //Create new custID to add the customer to the database
                             //Query the current Max ID
                              $query = "SELECT MAX(custID) FROM CUSTOMER";
                              $stmt = mysqli prepare($link, $query);
                             //Execute the guery statement
                              mysqli_stmt_execute($stmt);
                             //Bind the result to the variable #maxID
                              mysqli_stmt_bind_result($stmt, $maxID);
                              mysqli_stmt_fetch($stmt);
                             //Seperate the prefix from the ID#
                              $custID = substr($maxID,0,4);
                              $idNum = (int)substr($maxID,-3);
                             //Set New Customer's ID to the next available ID number
                             //Assume there are no deleted customers so there are no missing ID's
from 001 - MAX
                              $custID = $custID.str_pad($idNum + 1,3,"0",STR_PAD_LEFT);
                             //close the query
                              mysqli_stmt_close($stmt);
                             //NEEDS HELP ABOVE
                             //Create guery to submit the registration information to the database
                              $query =
                                             "INSERT INTO CUSTOMER (custID, fname, Iname, email,
membersince, renewaldate, password, username)
```

```
VALUES (?,?,?,?,?,?,?)";
                              //Prepare the query statement
                              if (!$stmt = mysqli_prepare($link, $query)) {
                                      die("Error in query");
                              }
                              //Bind parameters to markers
                              mysqli_stmt_bind_param($stmt, 'ssssssss', $custID, $fname, $lname,
$email, $membersince, $renewaldate, $hash_pword, $uname);
                              //Execute the query statement
                              mysqli_stmt_execute($stmt);
                              echo "Registration successful -- <a href = 'login.php'>LOGIN</a>";
                              //Close the statement
                              mysqli_stmt_close($stmt);
                       }
                       //Close the connection
                       mysqli_close($link);
       </body>
</html>
```

```
REGISTRATION.PHP
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
-->
<html>
       <head>
               <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
               <title>Registration</title>
       </head>
       <body style="font-family:'Calibri'">
               <!-- Header used for all pages on the site -->
               <center>
                       <h>>
                               <font size=+4>
                                      <a href="streamtv.php">
                                              streamTV
                                      </a>
                               </font>
                       </b>
                       <hr WIDTH="100%">
               </center>
               <?php
                       //Data verification section
                       //The first time the data is posted from the form, each form variable
                       //is checked here.
                       //Define variables and set to empty values
                       $unameErr = $pword1Err = $pword2Err = "";
                       $fnameErr = $lnameErr = $emailErr = $misatchErr = $tokenErr = "";
                       $uname = $pword1 = $pword2 = $fname = $lname = $email = $match = "";
                       //Test the data entered into the form to make sure that required fields are
                       //entered, password is verified, remove dangerous characters
                       if($_SERVER["REQUEST_METHOD"] == "POST"){
                               $allCorrect = true;
                               if (empty($_POST["uname"])) {
                                      $unameErr = "Username is required";
                                      $allCorrect = false;
                               }
                               else{
                                      $uname = test input($ POST["uname"]);
```

```
}
if (empty($_POST["pword1"])) {
        $pword1Err = "Password is required";
        $allCorrect = false;
}
else{
        $pword1 = test_input($_POST["pword1"]);
}
if(empty($_POST["pword2"])){
        $pword2Err = "Password verification is required";
        $allCorrect = false;
}
else{
        $pword2 = test_input($_POST["pword2"]);
        if (empty($_POST["fname"])) {
                $fnameErr = "First name is required";
                $allCorrect = false;
        }
        else{
                $fname = test_input($_POST["fname"]);
        }
        if(empty($_POST["Iname"])){
                $InameErr = "Last name is required";
                $allCorrect = false;
        }
        else{
                $Iname = test_input($_POST["Iname"]);
        }
}
if(empty($ POST["email"])){
        $emailErr = "Email is required";
        $allCorrect = false;
}
else{
        $email = test_input($_POST["email"]);
}
if($pword1 != $pword2){
        $mismatchErr = "Password verification does not match";
        $allCorrect = false;
}
else{
        $match = "match";
```

```
}
                            if($_POST['token'] != $token){
                                   $tokenErr = "Token failure".$_POST['token'];
                                   $allCorrect = false;
                           }
                            if ($allCorrect){
                                   //When all of the data passes the verification, session variables
are set
                                   //and page is redirected to register.php
                                   require_once "register.php";
                                   exit();
                            }
                     }
                     //Function to test the data to remove dangerous characters
                     function test_input($data){
                            $data = trim($data);
                            $data = stripslashes($data);
                            $data = htmlspecialchars($data);
                            return $data;
                     }
              ?>
             <!-- Form for registration data.
             Includes one hidden item to send the token with the form when it posts.
             <form name = "register" method="post"</pre>
                     action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>">
                     <input type="hidden" name="token" value="<?php echo $token; ?>" />
                     <strong>Registration
Form</strong>
                                   Username:
                                          <input type="text" name="uname"
maxlength="20"
                                          value="<?php echo $uname;?>" />*
                                   <span class="error"><?php echo $unameErr;?>
</span>
                            Password:
```

```
input type="password" name="pword1" />*
                          <span class="error"><?php echo $pword1Err;?>
</span>
                    Confirm Password:
                          ="pword2" />*
                          <span class="error"> <?php echo
$pword2Err;?></span>
                          <span class="error"> </span>
                    First Name:
                          <input type="text" name="fname" id="fname"
                          value="" />*
                          <span class="error"><?php echo $fnameErr;?> </span>
                          Last Name:
                          <input type="text" name="lname" id="lname"
                          value=""/>*
                          <span class="error"> <?php echo $InameErr;?></span>
                          Email:
                               <input type="text" name="email" id="email"
                               value="" />*
                               <span class="error"><?php echo $emailErr;?>
</span>
                           
                               <input type="submit" value="Register" />
                          </form>
     </body>
</html>
```

```
SHOW_EPISODE.PHP
<?php
       session_start();
?>
<!--
Author: David Iacono
CSC 436 Database Management Systems
Spring 2015 DiPippo
 Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
Display the Episodes of a Specific Show
<html>
       <body style="font-family:'Calibri'">
               <!-- Header used for all pages on the site -->
               <center>
                       <b>
                               <font size=+4>
                                      <a href="streamtv.php">
                                              streamTV
                                       </a>
                               </font>
                       </b>
                       <hr WIDTH="100%">
               </center>
               <?php
                       if(isset($_SESSION['cnum'])){
                               $custID = $_SESSION['cnum'];
                       }
                       else{
                               $custID = "";
                       }
                       //Get URL Params
                       $sID = $_GET['showID'];
                       $sTitle = $_GET['showTitle'];
                       //connect to database
                       include 'connect.php';
                       //Query for the Season, episodeID, title, and Airdate of all episodes from a given
ShowID
                       $query =
                                       "SELECT SUBSTRING(episodeID,1,1), episodeID, title, airdate
                                              FROM EPISODE
```

```
//prepare the Statement
                    if(!$stmt = mysqli_prepare($link,$query)){
                           die("Error in Query");
                    }
                    //bind the ? marker with the variable //sID
                    mysqli_stmt_bind_param($stmt,"s", $sID);
                    //Execute the Query
                    mysqli_stmt_execute($stmt);
                    //bind the Result into the variables $season,$episodeID,$eTitle,$airdate
                    mysqli_stmt_bind_result($stmt,$season,$episodeID,$eTitle,$airdate);
                    // Create a table to display the results
                    echo "Episodes of <i>$sTitle</i> <br>";
                    echo "SEASONTITLEAIR
DATE";
                    //Iterate through result set
                    while (mysqli_stmt_fetch($stmt)) {
                           echo "<center>$season</center>";
                           echo "<a href=
'episodeinfo.php?showID=$sID&episodeID=$episodeID'>$eTitle</a>";
                           echo "$airdate";
                    echo "";
                    #close the Query
                    mysqli_stmt_close($stmt);
                    mysqli_close($link);
      </body>
</html>
```

WHERE showID = ?";

```
SHOWINFO.PHP
<?php
       //Create session
       session_start();
?>
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
       Display details about a specific show
-->
<html>
       <body style="font-family:'Calibri'">
               <!-- Header used for all pages on the site -->
               <center>
                       <b>
                               <font size=+4>
                                      <a href="streamtv.php">
                                              streamTV
                                      </a>
                               </font>
                       </b>
                       <hr WIDTH="100%">
               </center>
               <b>The television show you searched for: </b>
               <?php
                       //Include the connect.php file for connections to the database.
                       include 'connect.php';
                       //Use the _GET method for getting variables passed through from the
                       //previous page.
                       $showID = $_GET['showID'];
                       //Create the query as a string with marker for showID
                       $query =
                                      "SELECT showID, title, premiere_year, network, creator,
category
                                              FROM SHOWS
                                              WHERE showID=?";
                       if($stmt = mysqli_prepare($link, $query)){
                              //Bind the parameter $showID to the ? marker in the guery string
```

```
mysqli_stmt_bind_param($stmt, 's', $showID);
                                                                                  //Execute the query statement
                                                                                  mysqli_stmt_execute($stmt);
                                                                                  //Bind the result to the variables $showID, $title, $pYear, $network,
$creator, $category
                                                                                  mysqli_stmt_bind_result($stmt, $showID, $title, $pYear, $network,
$creator, $category);
                                                                                  //Get the result and print it
                                                                                  //var dump(mysqli stmt fetch($stmt));
                                                                                  if(mysqli stmt fetch($stmt)){
                                                                                                       echo "<br>Title: $title
                                                                                                       <br/>

                                                                                                       <br>Network: $network
                                                                                                       <br>Creator: $creator
                                                                                                       <br>Category: $category<br>
                                                                                                       <br/>br>View <a href =
'show_episodes.php?showID=$showID&showTitle=$title'>All Episodes</a><br>";
                                                                                  else{
                                                                                                       echo "<br>Television Show not found";
                                                                                  //Close the statement
                                                                                  mysqli stmt close($stmt);
                                                              }
                                                              //If customer is Logged In,
                                                              //Allow to Queue, if show does not already exists.
                                                              if($_SESSION['cnum'] != ""){
                                                                                  $custID = $ SESSION['cnum'];
                                                                                  //Create the query to get the showID's from the customer's queue
                                                                                                                            "SELECT showID
                                                                                  $query =
                                                                                                                                                 FROM CUST_QUEUE
                                                                                                                                                WHERE custID=? AND showID=?";
                                                                                  if(!$stmt = mysqli_prepare($link, $query)){
                                                                                                       die("Error in Query");
                                                                                 }
                                                                                 //Bind the parameter $custID and $showID to the ? marker in the query
string
                                                                                  mysqli_stmt_bind_param($stmt, 'ss', $custID, $showID);
                                                                                  //Execute the guery statement
                                                                                  mysqli stmt execute($stmt);
```

```
//Bind the result to the variables $name and $price
                              mysqli stmt bind result($stmt, $showID);
                              //Execute the query statement
                              mysqli_stmt_execute($stmt);
                              //Store the result so we can get the number of rows
                              mysqli_stmt_store_result($stmt);
                              //Find out how many rows in the result
                              $rows = mysqli_stmt_num_rows($stmt);
                              //if logged in, and show does not already exist in queue, allow to add to
queue.
                              if($rows === 0){}
                                      echo "<br/>br><a href= 'queueshow.php?showID=$showID'>Add to
Queue</a><br>";
                              }
                              //Close the statement
                              mysqli_stmt_close($stmt);
                      }
                      //Query for Main Cast
                      echo "<b>Main Cast:</b>";
                      $query =
                                      "SELECT CONCAT(fname, ' ', Iname), MAIN_CAST.actID, role
                                             FROM MAIN CAST, ACTOR
                                             WHERE MAIN_CAST.actID=ACTOR.actID AND showID=?
                                             ORDER BY Iname";
                      if($stmt = mysqli_prepare($link, $query)){
                              //Bind the parameter $showID to the ? marker in the guery string
                              mysqli_stmt_bind_param($stmt, 's', $showID);
                              //Execute the query statement
                              mysqli_stmt_execute($stmt);
                              //Bind the result to the variables $actorName,$actID,$actorRole
                              mysqli_stmt_bind_result($stmt, $actorName, $actID, $actorRole);
                              //Get the result and print it
                              while(mysqli_stmt_fetch($stmt)){
                                      echo "<a href =
'actorinfo.php?actorID=$actID&actorName=$actorName'>$actorName </a>
                                             as $actorRole<br>";
```

```
}
                      }
                      //Close the statement
                      mysqli_stmt_close($stmt);
                      //Query for Recurring Cast
                      echo "<b>Recurring Cast:</b>";
                      $query =
                                     "SELECT CONCAT(fname, '',Iname), RECURRING_CAST.actID,
role, COUNT(*)
                                             FROM RECURRING_CAST, ACTOR
                                             WHERE RECURRING_CAST.actID=ACTOR.actID AND
showID=?
                                             GROUP BY CONCAT(fname, '',lname)
                                             ORDER BY Iname";
                      if ($stmt = mysqli_prepare($link, $query)) {
                             //Bind the parameter $showID to the ? marker in the query string
                              mysqli_stmt_bind_param($stmt, 's', $showID);
                             //Execute the guery statement
                              mysqli_stmt_execute($stmt);
                             //Bind the result to the variables
$actorName,$actID,$actorRole,$numAppeared
                              mysqli_stmt_bind_result($stmt,
$actorName,$actID,$actorRole,$numAppeared);
                             //Get the result and print it
                              while(mysqli_stmt_fetch($stmt)) {
                                     echo "<a href =
'actorinfo.php?actorID=$actID&actorName=$actorName'>$actorName</a>
                                             appeared in $numAppeared episodes as
<i>$actorRole</i><br>";
                              }
                      }
                      //Close the statement
                      mysqli_stmt_close($stmt);
                      //Close the link to the database
                      mysqli_close($link);
               ?>
       </body>
</html?
```

```
STREAMTV.PHP
<?php
       session start();
       require_once "connect.php";
?>
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
<html>
       <head>
       <title> streamTV </title>
       </head>
       <body style="font-family:'Calibri'">
               <?php
                       if (!isset($_SESSION['cnum'])) {
                               $_SESSION['cnum'] = "";
                       }
               ?>
               <!-- Header used for the whole site -->
               <center>
                       <h>>
                               <font size=+4>
                                      <a href="streamtv.php">
                                              streamTV
                                      </a>
                               </font>
                       </b>
                       <hr WIDTH="100%">
               </center>
               <!-- Search for a TV show -->
               <form action = "all_search.php" method = "post">
                       Search for a TV show or actor by title: <input name="newSearch" type "text">
                       <input type="submit" name="submit" value="Submit!">
               </form>
               <?php
                       if($ SESSION['cnum'] == ""){
                               echo "<a href = 'login.php'>Login</a> as an existing customer.
```

```
WATCHED_INFO.PHP
<?php
       //Start a session
       session_start();
?>
<!--
       Author: David Iacono
       CSC 436 Database Management Systems
       Spring 2015 DiPippo
       Using Fellowship Technologies HTML Code Standards:
http://developer.fellowshipone.com/patterns/code.php
        Display Episodes watched by the customer given a specific show
-->
<html>
       <head>
               <title> streamTV </title>
       </head>
       <body style="font-family:'Calibri'">
               <?php
                       if(isset($_SESSION['cnum'])){
                              $cnum = $_SESSION['cnum'];
                       }
                       else{
                              $cnum = "";
                       }
               ?>
               <!-- Header used for all pages on the site -->
               <center>
                       <b>
                              <font size=+4>
                                      <a href="streamtv.php">
                                              streamTV
                                      </a>
                              </font>
                       </b>
                       <hr WIDTH="100%">
               </center>
               <?php
                       //Get Parameters from URL
                       $showID = $_GET['showID'];
                       $showTitle = $ GET['title'];
                       $name = $_GET['name'];
```

```
//Display the number of episodes watched
                     echo "Episodes of <b><i>$showTitle</i></b> watched by $name:<br>";
                     //Include the connect.php file to connect to the database.
                     include 'connect.php';
                     //Query for all the watched episodes.
                                    "SELECT E.episodeID, title, datewatched
                     $query =
                                           FROM WATCHED W, EPISODE E
                                           WHERE W.episodeID = E.episodeID AND W.custID = ?
                                                  AND W.showID = ? AND E.showID = ?";
                     if(!$stmt = mysqli prepare($link, $query)){
                            die("Error in Query");
                     }
                     //bind the ? markers with variables $cnum, $showID(x2)
                     mysqli_stmt_bind_param($stmt, 'sss', $cnum, $showID, $showID);
                     //execute the query
                     mysqli stmt execute($stmt);
                     //bind the result to variables $episodeID, $episode, $dateWatched
                     mysqli stmt bind result($stmt, $episodeID, $episode, $dateWatched);
                     //Store the result so we can get number of rows
                     mysqli_stmt_store_result($stmt);
                     //Get the number of rows in the result
                     $rows = mysqli_stmt_num_rows($stmt);
                     if ($rows > 0) {
                            //Create a table to display the results
                            echo "TITLEDATE
WATCHED";
                            //Iterate through result set
                            while (mysqli_stmt_fetch($stmt)) {
                                   echo "<a
href='episodeinfo.php?showID=$showID&episodeID=$episodeID'>$episode</a>";
                                   echo "$dateWatched";
                            echo "";
                     }
                     else {
                            //No episodes found
                            echo " No episodes watched. <br>";
                     }
```

```
mysqli_stmt_close($stmt);
mysqli_close($link);
?>
</body>
</html>
```