```
mysql_connect('localhost','root',") or die('Cannot connect to server.');
       //database name
        mysql_select_db('members') or die('Cannot connect to database.');
       //update user score everytime it increases
       //function cardio_points(){
       //mysql_query("UPDATE `users` SET `` = " WHERE `user_id` = '$user_id'");
       //manual inputs to store and stores the information in a .csv file
        function inputData($cardio_points, $user_id){
                global $user_data;
                $cardio_points = $user_data['cardio_points'] + $cardio_points;
                $cardio_points = round($cardio_points);
                echo 'Your user score is now: ' . $cardio points;
                mysql_query("UPDATE `users` SET `cardio_points` = "" . $cardio_points . "' WHERE
`user_id` = " . (int)$user_id);
                //create and store manually inputed data into a .csv file
                //move .csv file to user_data folder
       }
       //returns user tips
       function daily_tips($result){
                $result = date('w');
                //echo $result;
                if(\$result == 0){
```

//server database, username, password

```
\frac{1}{3};
                       switch ($random){
                               case 1:
                                       $result = 'Find a smart and motivated training partner.';
                                       break;
                               case 2:
                                       $result = 'Schedule exact times for all workouts.';
                                       break;
                               case 3:
                                       $result = 'Keep a food and training log, and learn from it!';
                                       break;
                       }
               }
               if(\$result == 1){
                       \frac{1}{3}
                       switch ($random){
                               case 1:
                                       $result = 'Don\'t train in pain. Pain is your body\'s way of telling
you that something\'s wrong. Listen and act upon these messages!';
                                       break;
                               case 2:
                                       $result = 'Frame goals around behaviors rather than outcomes.';
                                       break;
                               case 3:
                                       $result = 'Continue doing what works. (Many times we tend to
discontinue doing things which have worked in the past.)';
                                       break;
                       }
               }
```

```
if(\$result == 2){
                        \frac{1}{3};
                        switch ($random){
                                case 1:
                                        $result = 'Identify and fortify weak links. This could refer to
habit patterns, muscle groups, motor qualities, etc.';
                                        break;
                                case 2:
                                        $result = 'In most things, the truth tends to be in the middle
(rather than the extremes.)';
                                        break;
                                case 3:
                                        $result = 'If you\'re under 40, hold your stretches for 30
seconds. If you\'re over 40, hold them for 60 seconds.';
                                        break;
                        }
                }
                if(\$result == 3){
                        \frac{1}{3}
                        switch ($random){
                                case 1:
                                        $result = 'Count your repetitions backward.';
                                        break;
                                case 2:
                                        $result = 'Exhale forcefully at the top of the movement when
you do abdominal crunches.';
                                        break;
                                case 3:
                                        $result = 'If you don\'t like an exercise, start doing it. \'You are
probably avoiding it because you are weak at it.\";
```

```
break;
                        }
                }
                if(\text{sesult} == 4){
                        $random = rand(1,3);
                        switch ($random){
                                case 1:
                                        $result = 'Use dumbbells, barbells, and machines in that order.';
                                        break;
                                case 2:
                                        $result = 'Keep your weight workouts under an hour.';
                                        break;
                                case 3:
                                        $result = 'Ensure your morning is seamless and quick.';
                                        break;
                        }
                }
                if(\text{sesult} == 5){
                        \frac{1}{3};
                        switch ($random){
                                case 1:
                                        $result = 'Envision waking up early, working out and enjoying
it.';
                                        break;
                                case 2:
                                        $result = 'To maximize your workout, good form is a must.';
                                        break;
                                case 3:
```

```
$result = 'We\'re all capable of much more than we think.
Believe yourself and you can accomplish it.';
                                        break;
                        }
                }
                if(\$result == 6){
                        \frac{1}{3};
                        switch ($random){
                                case 1:
                                        $result = 'Do more work in the same amount of time (workout
to workout) and muscle will grow.';
                                        break;
                                case 2:
                                        $result = 'In resistance training, we tend to focus too much on
what to lift and not enough on how or why. Think about it.';
                                        break;
                                case 3:
                                        $result = 'Try going outside an hour a day, even if its just sitting
in the park or walking around.';
                                        break;
                        }
                }
                return $result;
       }
        //stores user score
        function add_cardio_points($cardio_points, $user_id){
                global $user_data;
                $cardio_points = $user_data['cardio_points'] + $cardio_points;
                $cardio_points = round($cardio_points);
```

```
echo 'Your user score is now: ' . $cardio_points;
                mysql_query("UPDATE `users` SET `cardio_points` = "" . $cardio_points . "' WHERE
`user_id` = " . (int)$user_id);
       }
       //upload file, generate name, update user database with path of image
        function uploadDeviceData($user_id, $file_temp, $file_extn){
                $file_path = '../user_data/files/' . $_FILES['activity_file']['name'];
                move_uploaded_file($file_temp,
"~./user_data/files/"."{$_FILES['activity_file']['name']}");
                //insert to database
                mysql_query("UPDATE `users` SET `user_file` = "" . mysql_real_escape_string($file_path)
. "' WHERE `user_id` = " . (int)$user_id);
       }
       //checks if user is admin
       //NOTE: if changing type, need to also change 'admin_protect()' in general.php
        function has_access($user_id, $type){
                $user_id = (int)$user_id;
                $type = (int)$type;
                return (mysql result(mysql query("SELECT COUNT('user id') FROM 'users' WHERE
`user_id` = $user_id AND `type` = $type"), 0) == 1) ? true : false;
       }
       //recover password or username by email
        function recover($mode, $email){
```

```
//sanitize the data to prevent injection
               $mode = sanitize($mode);
               $email = sanitize($email);
               $user_data = user_data(user_id_from_email($email), 'user_id', 'first_name',
'username');
               if($mode == 'username'){
                       //recover username
                       email($email, 'Your username', "Hello " . $user_data['first_name'] . ",\n\nYour
username is: " . $user_data['username'] . "\n\n-something");
               }else if($mode == 'password'){
                       //recover password
                       $generated_password = substr(md5(rand(999, 999999)), 0, 8);
                       change_password($user_data['user_id'], $generated_password);
                       //force user to update new password after temporary password
                       update user($user data['user id'], array('password recover' => '1'));
                       email($email, 'Your password recovery', "Hello " . $user data['first name'] .
",\n\nYour new password is: " . $generated_password . "\n\n-something");
               }
        }
       //update user information
        function accountSettings($user id, $update data){
               $update = array();
```

```
//checks every element in array is valid
               array_walk($update_data, 'array_sanitize');
               foreach($update_data as $field=>$data){
                        $update[] = '`' . $field . '` = \" . $data . '\";
               }
               //for testing only
               //print_r($update);
               //die();
               mysql_query("UPDATE `users` SET " . implode(', ', $update) . " WHERE `user_id` =
$user_id");
       }
       //activating the account through email
        function activate($email, $email_code){
               $email = mysql_real_escape_string($email);
                $email_code = mysql_real_escape_string($email_code);
               //check if email codes match
               if(mysql_result(mysql_query("SELECT COUNT(`user_id`) FROM `users` WHERE `email` =
'$email' AND `email code` = '$email code' AND `active` = 0"), 0) == 1){
                        //query to update user active status
                        mysql_query("UPDATE `users` SET `active` = 1 WHERE `email` = '$email'");
                        return true;
               }else{
                        return false;
               }
```

```
}
       //change user password
       function change_password($user_id, $password){
               //sanitize the data
               $user_id = (int)$user_id;
               $password = md5($password);
               mysql_query("UPDATE `users` SET `password` = '$password', `password_recover` = 0
WHERE `user_id` = $user_id");
       }
       //store the amount of active users
       function user_count(){
               return mysql_result(mysql_query("SELECT COUNT(`user_id`) FROM `users` WHERE
`active` = 1"), 0);
       }
       //register new user data
       function registerUser($register_data){
               //for testing only
               //print_r($register_data);
               //die();
               //checks every element in array is valid
               array_walk($register_data, 'array_sanitize');
               $register_data['password'] = md5($register_data['password']);
```

```
$fields = '`' . implode('`, `', array_keys($register_data)) . '`';
                $data = '\'' . implode('\', \'', $register_data) . '\'';
                //for testing only
                //echo $data;
                //echo $fields;
                //die();
                mysql_query("INSERT INTO `users` ($fields) VALUES ($data)");
//needs to change link and url to whatever link you are using
                //send email of verification code
                //email($register_data['email'], 'Activate your account', "
                //Hello " . $register_data['first_name'] . ",\n\nYou need to active your account, use the
link below to activate your account:\n\nhttp://se1.engr.rutgers.edu/~13group12/activate.php?email=" .
$register_data['email'] . "&email_code=" . $register_data['email_code'] . " \n\n-whoever");
        }
        //retrieves user data for usage
        function user_data($user_id){
                $data = array();
                //remove characters from the id, prevents sql injection
                $user_id = (int)$user_id;
                $func_num_args = func_num_args();
                $func_get_args = func_get_args();
                //for testing only
```

```
//print_r($func_get_args);
             if($func_num_args > 1){
                    unset($func_get_args[0]);
                    $fields = '`' . implode('`, `', $func_get_args) . '`';
                    $data = mysql_fetch_assoc(mysql_query("SELECT $fields FROM `users` WHERE
`user_id` = $user_id"));
                    //return data in array
                    return $data;
             }
      }
      //sorts the leader in cardio_points
      function leader_list($user_id) {
             $sql = "SELECT * FROM `users` ORDER BY `cardio_points` DESC";
             $result = mysql_query($sql);
             $i = 1;
             echo "
             Top 5
LeadersNumberUsernameCardio
PointsGender";
             while ($row = mysql_fetch_array($result)) {
                    //printf("Name: %s Score: %s", $row["username"], $row["cardio_points"]);
```

```
echo '' . $i . '' . $row["username"] . '' .
$row["age"] . '' . $row["cardio_points"] . '' . $row["gender"] . '';
                             $i++;
                             if($i == 6){
                                    break;
                             }
              }
              echo "";
              return $result;
       }
       //checks if the user is logged in
       function logged_in(){
              return (isset($_SESSION['user_id'])) ? true : false;
       }
       //checks if user exists
       function user_exists($username){
              //removes unnecessary keys, prevents sql injection
              $username = sanitize($username);
              //checks if user is in database From table
              $query = mysql_query("SELECT COUNT(`user_id`) FROM `users` WHERE `username` =
'$username'");
              return(mysql_result($query, 0) == 1) ? true : false;
       }
```

```
//checks if user email exists
       function email_exists($email){
               //removes unnecessary keys, prevents sql injection
               $email = sanitize($email);
               //checks if user is in database From table
               return(mysql_result(mysql_query("SELECT COUNT(`user_id`) FROM `users` WHERE
`email` = '$email'"), 0) == 1) ? true : false;
       }
       function user_active($username){
               //removes unnecessary keys, prevents sql injection
               $username = sanitize($username);
               //checks if user is in database
               return(mysql_result(mysql_query("SELECT COUNT(`user_id`) FROM `users` WHERE
`username` = '$username' AND `active` = 1"), 0) == 1) ? true : false;
       }
       function user_id_from_username($username){
               $username = sanitize($username);
               return mysql result(mysql query("SELECT `user id` FROM `users` WHERE `username` =
'$username'"), 0, 'user_id');
       }
       function user_id_from_email($email){
               $email = sanitize($email);
               return mysql result(mysql query("SELECT 'user id' FROM 'users' WHERE 'email' =
'$email'"), 0, 'user_id');
       }
       function login($username, $password){
```

```
$user_id = user_id_from_username($username);
               //secure the password and username
               $username = sanitize($username);
               //convert password
               $password = md5($password);
               return (mysql_result(mysql_query("SELECT COUNT(`user_id`) FROM `users` WHERE
`username` = '$username' AND `password` = '$password'"), 0) == 1) ? $user_id : false;
       }
       //prevent register page to appear when logged in
       function logged_in_redirect(){
               if(logged_in() === true){
                       header('Location: home.php');
                       exit();
               }
       }
       //redirect user if not logged in
       function protect_page(){
               if(logged_in() === false){
                       header('Location: protected.php');
                       exit();
               }
       }
       //keeps users away from page if not an admin
       //NOTE: if changing type, need to change 'is_admin()' in users.php
```

```
function admin_protect(){
        global $user_data;
        if(has_access($user_data['user_id'], 3) === false){
               header('Location: index.php');
                exit();
        }
}
//loop through elements to prevent sql injections
//NOTE: must have & sign before $item
//strips tags off first, then turns into html code
function array_sanitize(&$item){
        $item = htmlentities(strip_tags(mysql_real_escape_string($item)));
}
//removes escape characters to prevent sql injections
function sanitize($data){
        return htmlentities(strip_tags(mysql_real_escape_string($data)));
}
//report error from array in a list
function output_errors($errors){
        return ''. implode('', $errors) . '';
}
```