ISIT307 - Web Server Programming

<u>Assignment – 3 (Digital Library)</u> Tutorial-03 (FT)

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Assignment number: 3

Create the database (Users / Books/ Ioan)

```
// sql to create user table
$user = "CREATE TABLE Users (
id int AUTO_INCREMENT PRIMARY KEY,
username varchar(30) UNIQUE NOT NULL,
password varchar(50) NOT NULL,
name varchar(30) NOT NULL,
surname varchar(30) NOT NULL,
phone int(8) NOT NULL,
email varchar(50) NOT NULL,
type varchar(50) DEFAULT 'Librarian'
)";
// sql to create Books table
$books = "CREATE TABLE Books (
  ISBN varchar(50) NOT NULL,
  Title varchar(50) NOT NULL,
 Author varchar(50) NOT NULL,
 Publisher varchar(50) NOT NULL,
 status varchar(20) DEFAULT 'Available',
 costPerDay int NOT NULL,
 extendedCostPerDay int NOT NULL,
  rentedBy varchar(30) NULL
$loan = "CREATE TABLE loan (
  id int AUTO_INCREMENT PRIMARY KEY,
  bookID int,
  username varchar(50),
  borrowedDate date,
  ExtendedDate date NULL,
  totalCost int NULL
```

```
//CREATE Librian account
$insert = "INSERT INTO `users` (id, username, password, name, surname, phone, email, type)
VALUES (NULL, 'Ting', '1234', 'Ting', '91234567', 'TT@mail.com', 'Librarian')";

if ($con->query($user) === TRUE) {
    //echo "Table Users created successfully";
} else {
    //echo "Error creating table: " . $con->error;
    $con->error;
}
```

Create Librarian Account & Insert into database first



Librarian

1. User Login / Register (register.php)

- Register a new account & login as "Librarian"

| Username: | Jason | |
|-----------|-----------------|--|
| Password: | •••• | |
| Name: | Jason | |
| Surname: | Lee | |
| Phone: | 89448716 | |
| Email: | Jason@gmail.com | |
| Туре: | Librarian 🗸 | |
| Submit | | |



Code

- Insert all the user details into database

Login with "Ting" Librarian account (index.php)

Login Page Username: Ting Password: Login Register Here

Code

```
if ($con->query($user) === TRUE) {
} else {
 $con->error;
if ($con->query($books) === TRUE) {
} else {
 $con->error;
if ($con->query($loan) === TRUE) {
 $con->error;
if ($con->query($insert) === TRUE) {
} else {
 $con->error;
$con -> close();
$dbc = mysqli_connect($servername, $username, $password, $dbname);
```

```
$dbc = mysqli_connect($servername, $username, $password, $dbname);
if(isset($_POST['submit'])){
 $username = $_POST['username'];
 $password = $_POST['password'];
 $_SESSION['username'] = $_POST['username'];
 $user=mysqli_query($dbc,"SELECT * FROM users WHERE username='$username' AND password='$password'");
 $sql= "(SELECT * FROM `users` where username='$username' && password='$password')";
 $result = mysqli_query($dbc, $sql);
   $row = mysqli_fetch_array($result);
   $username = $row['username'];
   $type = $row['type'];
   $_SESSION["username"] = $row["username"];
   $_SESSION["type"] = $row["type"];
   if(mysqli_num_rows($user)==1){
     $_SESSION["username"] = $row["username"];
     header("Location:listBook.php");
                                                // Redirect
     die('should have redirected by now');
   else {
echo "Error! No user found.";
   if (isset($_POST['register']))
     header("Location: register.php");
 mysqli_query($dbc, $sql);
 $dbc -> close();
```

Login to Librarian Dashboard (listBook.php)

| | | | | | | Welcome, Tin |
|------------------|--------|-----------|-----------|--------------|-----------------------|--------------|
| Books List | | | | | | |
| ISBN | Title | Au | thor | Status | Search | |
| # ISBN Title | Author | Publisher | Status | Cost Per Day | Extended Cost Per Day | Action |
| | | | | | | Edit |
| 4 B111 Chemistry | Jom | Leo | Available | 5 | 10 | View |
| | | | | | | Edit |
| 5 CDE Eng | Flora | том | Available | 10 | 12 | |
| | | | | | | View |

Code

```
//connect to database
$dbc = mysqli_connect($servername, $username, $password, $dbname);

// Searchd By
$searchISBN="";
$searchItle="";
$searchAuthor="";
$searchAuthor="";
$searchStatus="";

//TO SEARCH for Book by ( ISBN, Title, Author, Status)
if(isset($_GET['searchISBN']) AND isset($_GET['searchTitle']) AND isset($_GET['searchAuthor']) AND isset($_GET['searchSBN']) // grab keyword

$searchISBN = $_GET['searchISBN']; // grab keyword

$searchAuthor = $_GET['searchTitle'];
$searchAuthor = $_GET['searchAuthor'];
$searchAuthor = $_GET['searchAuthor'];
$searchStatus = $_GET['searchStatus'];

$sql ="SELECT * FROM books WHERE status='Available'
AND (ISBN LIKE '%$searchISBN%' AND Title LIKE '%$searchTitle%' AND Author LIKE '%$searchAuthor%' AND status LIKE '%$searchStatus*')
ORDER BY id ASC";

}else
$sql = "SELECT * FROM books WHERE status='Available' ORDER BY id ASC";

$result = mysqli_query($dbc, $sql);
}
```

(Search the book list by Keywords)

```
echo " (table bgcolor.'m800000' border 1 width-'80%')

(TO)

(TO)
```

Display all the available books

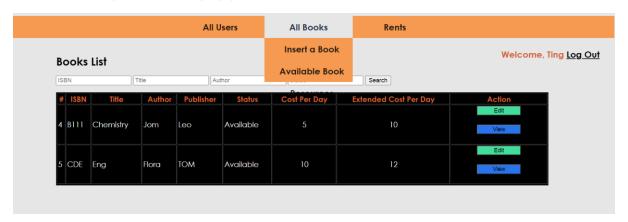
View All users (allUsers.php)

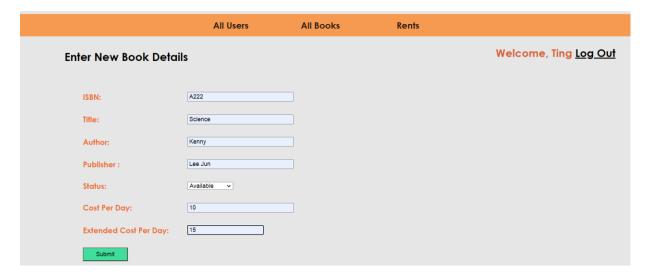


Code (allUsers.php)

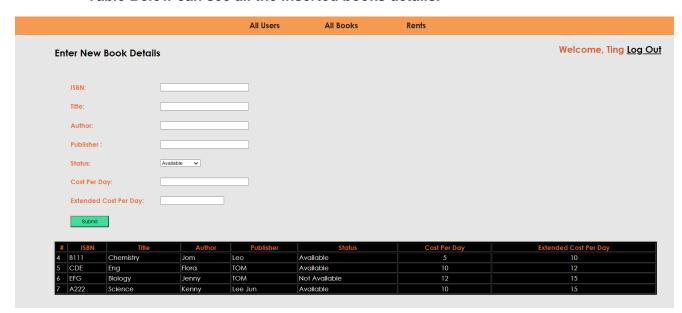
```
//connect to database
   $dbc = mysqli_connect($servername, $username, $password, $dbname);
   $sql = "SELECT * FROM users ORDER BY name ASC";
 $result = mysqli_query($dbc, $sql);
<br>
</div>
<div id="container">
<h1>All Users</h1><br><br><br><br>
<?php
 echo " 
 Username
    Name
    Surname
    Phone
    Email
    Type
 ";
      while($row = mysqli_fetch_array($result)) {
      $id = $row['id'];
    <!--<td><?php echo $row["id"];?>-->
    <center><?php echo $row["username"];?>
    <center><?php echo $row["name"];?>
    <center><?php echo $row["surname"];?>
    <center><?php echo $row["phone"];?>
    <center><?php echo $row["email"];?>
    <center><?php echo $row["type"];?>
```

Insert a Book (insertBook.php)





- Fill in the form and Submit the book info.
- Table Below can see all the inserted books details.



Code

Insert into database

- Display the Inserted info with table form below on the web page

Access All "available" Books (availBook.php)

| | | | | All Us | sers A | II Books Ro | ents | |
|-----|----------|-----------|--------|-----------|-----------|--------------|-----------------------|--------------------------|
| Α١ | /ailable | Books | | | | | | Welcome, Ting <u>Log</u> |
| ISB | N | Title | Author | Status | Sear | ch | | |
| # | ISBN | Title | Author | Publisher | Status | Cost Per Day | Extended Cost Per Day | Action |
| 4 | B111 | Chemistry | Jom | Leo | Available | | 10 | Edit View |
| 5 | CDE | Eng | Flora | том | Available | 10 | 12 | Edit View |
| 7 | A222 | Science | Kenny | Lee Jun | Available | 10 | 15 | Edit View |

Code

```
//connect to database
$dbc = mysqli_connect($servername, $username, $password, $dbname);
$searchISBN="";
$searchTitle="";
$searchAuthor="";
$searchAuthor="";
$searchStatus=";

//TO SEARCH for Book by ( ISBN, Title, Author, Status)
if(isset($_GET['searchISBN'])
AND isset($_GET['searchAuthor'])
AND isset($_GET['searchAuthor'])
AND isset($_GET['searchSBN']; // grab keyword
$searchISBN = $_GET['searchISBN']; // grab keyword
$searchItle = $_GET['searchStatus'])){
$searchAuthor = $_GET['searchStatus'];
$searchAuthor = $_GET['searchStatus'];
$searchStatus = $_GET['searchStatus'];
$searchStatus = $_GET['searchStatus'];

$sql = "SELECT * FROM books
MHIERE status='Available'
AND (ISBN LIKE '%$searchISBN%' AND Title LIKE '%$searchTitle%' AND Author LIKE '%$searchAuthor%' AND status LIKE '%$searchStatus*')

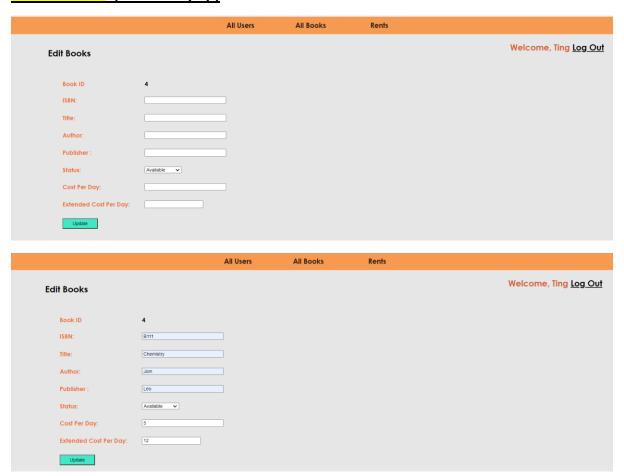
ORDER BY id ASC";

$result = mysqli_query($dbc, $sql);
}
```

- Connect to database and Search available book By Keywords

Display all the available books lists

Edit the Book (editbook.php)





<u>Code</u>

```
$check = mysqli_fetch_array($sql);
  if (isset($_POST['update']))
    $ISBN = $_POST['ISBN'];
    $Title = $_POST['Title'];
   $Author = $_POST['Author'];
$Publisher = $_POST['Publisher'];
    $status = $_POST['status'];
    $costPerDay = $_POST['costPerDay'];
    $extendedCostPerDay = $_POST['extendedCostPerDay'];
   if($status == 'Available'){
  $update = "UPDATE books
     SET ISBN='$ISBN',
      Title='$Title',
     Author='$Author',
     Publisher='$Publisher',
     status='$status',
      costPerDay='$costPerDay',
     extendedCostPerDay='$extendedCostPerDay',
     WHERE id='$id'";
    else if ($status == 'Not Available') //If user set to Available , Update accordingly
      $update = "UPDATE books
     SET ISBN='$ISBN',
      Title='$Title',
     Author='$Author'
     Publisher='$Publisher',
     status='$status',
     costPerDay='$costPerDay',
     extendedCostPerDay='$extendedCostPerDay'
     WHERE id='$id'";
    $update_Result = mysqli_query($dbc, $update);
    header("Location: listBook.php");
```

View book details (viewbook.php)

```
Welcome, Ting Log Out

Sookd ID: 4
ISSN: B111
Title: Chemistry
Author: Jom
Publisher: Leo
Status: Available
Cost Per Day: 5
Extended Cost Per Day: 12

BBOX TO Home
```

Code

```
<h1><u>View Book Detail:</u></h1><br><br><br>
 $id = $_GET["ID"];//Get ID from URL
     $sql = "SELECT * FROM books WHERE id ='$id'";  //View Specific Book
     $search_Result = mysqli_query($dbc, $sql);
     if($search_Result)
      if(mysqli_num_rows($search_Result))
        while($row = mysqli_fetch_array($search_Result))
          $id = $row['id'];
          $ISBN = $row['ISBN'];
          $Title = $row['Title'];
          $Author = $row['Author'];
          $Publisher = $row['Publisher'];
          $status = $row['status'];
          $costPerDay = $row['costPerDay'];
          $extendedCostPerDay = $row['extendedCostPerDay'];
$rentedBy = $row['rentedBy'];
        echo 'Invalid Book';
      else{ echo 'Result Error';
     $sql = mysqli_query ($dbc, "SELECT * FROM books WHERE id = '$id' ");
   $check = mysqli_fetch_array($sql);
```

```
if (isset($_POST['home']))
{
    header("Location: listBook.php"); //redirect page
}
?>
```

View all the Rented Books Details (rentedBook.php)



Code (rentedBook.php)

```
$dbc = mysqli_connect($servername, $username, $password, $dbname);
$rentedBy = "";
  $searchISBN="";
$searchTitle="";
  $searchAuthor="
  $searchStatus="";
  if(isset($_GET['searchISBN'])
  AND isset($_GET['searchTitle'])
AND isset($_GET['searchAuthor'])
  AND isset($_GET['searchStatus']))
       $searchISBN = $_GET['searchISBN']; // grab keyword
$searchTitle = $_GET['searchTitle'];
       $searchAuthor = $_GET['searchAuthor'];
$searchStatus = $_GET['searchStatus'];
        books.ISBN AS 'ISBN',
books.Title AS 'Title',
        books.Author AS 'Author'
        books.Publisher AS 'Publisher',
books.status AS 'status'
        ON books.id = loan.bookID
        WHERE (books.ISBN LIKE '%$searchISBN%'
        AND books.Title LIKE '%$searchTitle%'
        AND books.Author LIKE '%$searchAuthor%'
        AND books.status LIKE '%$searchStatus%')";
```

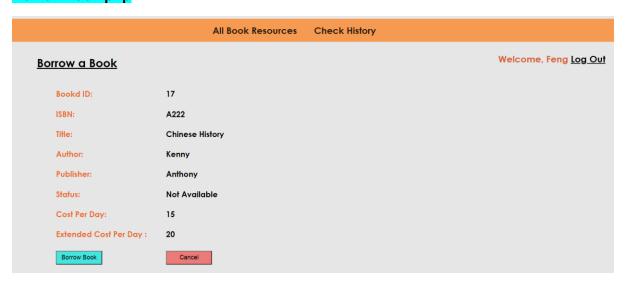
BORROWER

Login As "Borrower"

- Borrower Dashboard (listBook.php)



BorrowBook.php



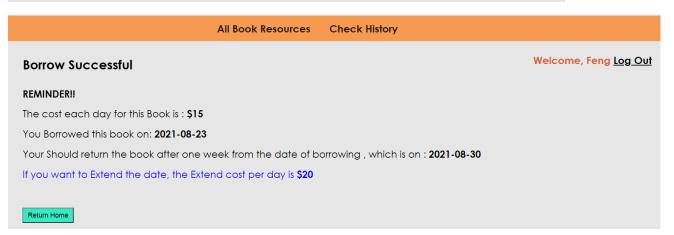
- After the user clicked "borrow" button, Alert the notification message

Code (Borrow.php)

```
//Connect to database
$dbc = mysqli_connect($servername, $username, $password, $dbname);
$rentedBy = "";
   $id = $_GET["ID"];//Get ID from URL
   $sql = "SELECT * FROM books WHERE id ='$id'";
   $search_Result = mysqli_query($dbc, $sql);
   if($search_Result)
      if(mysqli_num_rows($search_Result))
       while($row = mysqli_fetch_array($search_Result))
         $id = $row['id'];
         $ISBN = $row['ISBN'];
         $Title = $row['Title'];
         $Author = $row['Author'];
         $Publisher = $row['Publisher'];
         $status = $row['status'];
         $costPerDay = $row['costPerDay'];
         $extendedCostPerDay = $row['extendedCostPerDay'];
         $rentedBy = $row['rentedBy'];
       echo 'Invalid Book!';
     else{ echo 'Result Error';
    $sql = mysqli_query ($dbc, "select * from books WHERE id = '$id' ");
  $check = mysqli_fetch_array($sql);
```

Redirect Page after clicked "Borrow Book" button → (successBorrow.php)

localhost says
The cost per day for this book is \$15



Code (SuccessBorrow.php)

```
$dbc = mysqli_connect($servername, $username, $password, $dbname);
$rentedBy = "";
   $id = $_GET["ID"];
                         //Get ID from URL
   $sql = "SELECT books.id AS 'Book ID',
   loan.bookID AS 'Loan ID',
   books.costPerDay AS 'costPerDay',
   books.extendedCostPerDay AS 'extendedCostPerDay',
    loan.borrowedDate AS 'borrowedDate',
    loan.ExtendedDate AS 'ERD'
   FROM books
    INNER JOIN loan ON books.id = loan.bookID";
   $search_Result = mysqli_query($dbc, $sql);
    if($search_Result)
     if(mysqli_num_rows($search_Result))
       while($row = mysqli_fetch_array($search_Result))
         $bookID = $row['Book ID'];
         $loanID = $row['Loan ID'];
         $costPerDay = $row['costPerDay'];
         $extendedCostPerDay = $row['extendedCostPerDay'];
         $borrowedDate = $row['borrowedDate'];
         $ExtendedDate = $row['ERD'];
       echo 'Invalid Book!';
       else{ echo 'Result Error';
 $sql = mysqli_query ($dbc, $sql);
```

Borrower Access (Current Borrowing Book)

myRents.php



Code (myRents.php)

```
//connect to database
    $dbc = mysqli_connect($servername, $username, $password, $dbname);

$username= $_SESSION["username"]; //Get username from session.

$sql ="SELECT DISTINCT books.id AS 'Book ID',
    books.ISBN AS 'ISBN',
    books.Iitle AS 'Title',
    books.Author AS 'Author',
    books.Publisher AS 'Publisher',
    books.Publisher AS 'Publisher',
    books.costPerDay AS 'costPerDay',
    books.extendedCostPerDay AS 'extendedCostPerDay',
    loan.borrowedDate AS 'Borrow Date'
    FROM books INNER JOIN loan
    ON books.id = loan.bookID
    WHERE books.rentedBy='$username' ORDER BY books.id ASC";

$result = mysqli_query($dbc, $sql);
```

Borrower search available book By keywords (availBook.php)



