

Practical Set 2

Week 9 Practical Tasks

Objectives

- Exercises 1,2,3,4,5 is part of practical set 2 submission
- develop PHP scripts to connect to the BOOKSTORE database and displaying all records based on the given criteria
- session control and include in PHP
- Valid your solutions on XAMPP through the Apache module and MySQL module.
Save your solutions under C:/TWA/Practicals/PracSet2/week9Tasks folder

PHP Database Access

The following task is to help you work through how to connect to a MySQL database from your PHP scripts. You will use a MySQL database named BOOKSTORE. The script to populate the database is provided in the week9tasks folder: bookstore.sql. The BOOKSTORE database consists of four tables: BOOK, AUTHOR, PUBLISHER, WRITES. Below gives the definition of these four tables, the underlined fields indicate the primary key of each table. *Italic* fields represent foreign keys for some tables.

Table Name: BOOK

Field Name	Data Type	Description
bookID	CHAR(6)	unique identifier for a book
booktitle	CHAR(30)	title of a book
ISBN	CHAR(30)	ISBN of a book
price	DECIMAL(8,2)	Selling price of a book
genre	CHAR(15)	Category of a book
edition	INT(2)	Current edition of a book
language	CHAR(15)	Written language of a book
quantity	INT(4)	Stock level for a book
<i>publishID</i>	CHAR(7)	PublisherID for a book

Table Name: AUTHOR

Field Name	Data type	Description
authorID	CHAR(7)	Unique identifier for an author
firstname	CHAR(15)	First name for an author
lastname	CHAR(15)	Last name for an author
birthdate	DATE	DOB for an author
phone	CHAR(10)	Contact phone
email	CHAR(20)	Email address
address	CHAR(36)	Postal address
country	CHAR(16)	Country

Table Name: WRITES

Field Name	Data type	Description
<u>authorID</u>	CHAR(7)	Unique identifier for an author
<u>bookID</u>	CHAR(6)	unique identifier for a book

Table Name: PUBLISHER

Field Name	Data type	Description
publishID	CHAR(7)	Unique identifier for a publisher
name	CHAR(15)	Name for a publisher
postaddress	CHAR(35)	Postal address
phone	CHAR(10)	Phone contact
email	CHAR(20)	Email address
region	CHAR(16)	Region for a publisher

Exercise 1

Create a PHP page named **exercise1.php** that will display **all records of the four tables** from the bookstore database. Upload `exercise1.php` to `C:/TWA/Practicals/PracSet2/Week9Tasks` folder after validating the script under the `C:/XAMPP/htdocs` folder. **Note that all fields of the four tables should be displayed.**

The following example code will be helpful (you will need to refer to the database table definitions above to determine the names of the fields that are not included in the example code below):

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf -8">
    <title>Week 9 PHP task 1</title>
    <link rel="stylesheet" href="styles.css">
  </head> <body>
    <?php
      $dbConn =new mysqli("localhost", "root", "", "bookstore");
      if($dbConn->connect_error) {
die('Connection Error ( ' . $dbConn->connect_errno . ') ' . $dbConn->connect_error);
      }
      $sql = "select * from book";
      $recordSet = $dbConn->query($sql);
    ?>

    <h1>Book table</h1>
    <table>
      <tr>
        <th>Book ID</th>
        <th>Book Title</th>
        <th>ISBN</th>
        <th>Price</th>
        <th>Genre</th>
        <th>Edition</th>
        <th>Language</th>
        <th>Quantity</th>
        <th>Publisher</th>
      </tr>

      <?php
        while ($row = $recordSet->fetch_assoc())
        { ?>
          <tr>
            <td>
              <?php echo $row["bookID"]?>
```

```

        </td>
        <td>
            <?php echo $row["booktitle"]?>
        </td>
        <!-- output the other fields here from the
        $row array -->
    </tr>

<?php
    }
?>
</table>
<?php $dbConn->close();
?>
</body>
</html>

```

Note: Don't try to use a single sql query to obtain all of the data from the tables.

Exercise 2

Create **exercise2.php** which uses include statement to establish the connection object by dbConn.php in the week9 tasks folder. In exercise2.php, write an SQL statement that extracts records from BOOK table with which language (field 'lang') is English. Display the results in an HTML table. **Save exercise2.php** in C:/TWA/Practicals/PracSet2/week9Tasks folder after validating the script under C:/XAMPP/htdocs folder.

Exercise 3

Create **exercise3.php** which uses include statement to establish the connection object by dbConn.php in the week9 tasks folder. In exercise3.php, write an SQL statement that extracts the *booktitle*, *price* and *quantity* from the BOOK table for the books that have less than 1000 copies in stock and sort the results in ascending order of *price*. Display the results in an HTML table in exercise3.php. Validate the script under the C:/XAMPP/htdocs and **Save exercise3.php** and upload it to C:/TWA/Practicals/PracSet2/week9Tasks folder.

Exercise 4

- Create 2 php pages. The first page, **exercise4.php**, is the action for the form in task4.html. The exercise4.php file should receive the data from the task4.html form and store the values into appropriate session variables. The only output on page exercise4.php will be a hypertext link which links to exercise4a.php (the second of the two php files that you will create).
- The second php page: **exercise4a.php**, is to retrieve the session variables that were created by the exercise4.php page. After retrieving the session variables from the server, the page should display the values in an appropriate way. If the session variables have not been created then the exercise4a.php page should automatically redirect to task4.html. Note: this will logically only be the case if the user tries to visit exercise4a.php directly without filling in the form in task4.html and submitting it first.

task4.html	exercise4.php	exercise4a.php
<div><h3>Hobby Selection Page</h3><p>Your Name: <input type="text"/></p><p>Favourite hobby : <input type="text" value="please choose an option"/></p><p><input type="submit" value="Submit Form"/></p></div>	<div><p>Lets visit the second page</p></div>	<div><p>Hello Ana Gram. Your hobby is music</p><p>Go to the starting form</p></div>

Validate the scripts under the C:/XAMPP/htdocs and Save theses files as to C:/TWA/Practicals/PracSet2/week9Tasks folder.

Exercise 5

In this week practical exercises folder, you will find **task5.html**. Upload this file to **C:/TWA/Practicals/PracSet2/week9** folder. This file contains a form with an input text box to enter a publishID. **Note:** Do **NOT** change the content of this file in any way.

Create a PHP page named **exercise5.php**. This file will be the action for the form in task5.html; it will receive the *publisherID* from the task5.html page when it submits. Based on the submitted data from the form, exercise5.php should extract the corresponding *publisherID*, *name*, *booktitle* (the results should be in ascending order of the *publisherID*). Display the results in an appropriate HTML table.

Test the PHP script by entering a **valid** *publisherID* in the text box of the form and then click submit.

Verify that the results you obtain are correct by comparing with the tables in the database server on XAMPP through the MySQL server.

If the user submits a non-existing *publisherID* in the textbox of the form, display non-existing publisher messages on the exercise5.php page.