NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

Web Engineering - Lab

Lab Exam

Submitted By

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Submitted To

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```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Library Management System</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 20px;
            background-color: #f5f5f5;
        }

        h2 {
            color: #333;
        }

        form {
            margin-top: 20px;
            background-color: #fff;
            padding: 20px;
            border-radius: 8px;
            box-shadow: 0 0 5px rgba(0, 0, 0, 0.1);
        }

        label {
            display: block;
            margin-bottom: 8px;
            color: #333;
        }

        input, button {
            width: 100%;
            padding: 8px;
            margin-bottom: 15px;
            border: 1px solid #ccc;
            border-radius: 4px;
            box-sizing: border-box;
        }

        button {
            background-color: #000000;
            color: white;
            cursor: pointer;
        }

        button:hover {
            background-color: #45a049;
```

```php
        }

    </style>
</head>
<body>

<?php
// Database connection
$host = "localhost";
$username = "root";
$password = "";
$database = "library";

$conn = new mysqli($host, $username, $password, $database);

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

// Create Operation - Add new book
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $title = $_POST["title"];
    $author = $_POST["author"];
    $publication_year = $_POST["publication_year"];
    $quantity_available = $_POST["quantity_available"];

    // Check if the book already exists
    $check_sql = "SELECT * FROM books WHERE title = '$title' AND author =
'$author'";
    $check_result = $conn->query($check_sql);

    if ($check_result->num_rows > 0) {
        echo "<p>Book already exists in the database.</p>";
    }
    else {
        // Book does not exist, insert it
        $insert_sql = "INSERT INTO books (title, author, publication_year,
quantity_available)
                       VALUES ('$title', '$author', '$publication_year',
'$quantity_available')";

        if ($conn->query($insert_sql) === TRUE) {
            echo "<p>New book added successfully!</p>";
        } else {
            echo "Error: " . $insert_sql . "<br>" . $conn->error;
        }
    }
}
```

```php
// Read Operation - Display books as text
echo "<h2>Book List</h2>";

// Search functionality
if (isset($_GET['search'])) {
    $search = $_GET['search'];
    $search_sql = "SELECT * FROM books WHERE title LIKE '%$search%' OR author
LIKE '%$search%'";
    $result = $conn->query($search_sql);
} else {
    $result = $conn->query("SELECT DISTINCT * FROM books");
}

if ($result->num_rows > 0) {
    while ($row = $result->fetch_assoc()) {
        echo "<p><strong>Title:</strong> {$row['title']}<br>
              <strong>Author:</strong> {$row['author']}<br>
              <strong>Publication Year:</strong>
{$row['publication_year']}<br>
              <strong>Quantity Available:</strong>
{$row['quantity_available']}</p>";
    }
} else {
    echo "<p>No books found.</p>";
}
$conn->close();
?>

<!-- HTML Form for Create Operation -->
<form method="post" action="">
    <h2>Add New Book</h2>
    <label for="title">Title:</label>
    <input type="text" name="title" required>

    <label for="author">Author:</label>
    <input type="text" name="author" required>

    <label for="publication_year">Publication Year:</label>
    <input type="number" name="publication_year">

    <label for="quantity_available">Quantity Available:</label>
    <input type="number" name="quantity_available" required>

    <button type="submit">Add Book</button>
</form>

<!-- HTML Form for Search Operation -->
```

```html
<form method="get" action="">
    <h2>Search Books</h2>
    <label for="search">Search by Title or Author:</label>
    <input type="text" name="search">
    <button type="submit">Search</button>
</form>
</body>
</html>
```

Add New Book

Title:

Author:

Publication Year:

Quantity Available:

Add Book

Search Books

Search by Title or Author:

Search

Book List

Title: Web
Author: Umer
Publication Year: 2019
Quantity Available: 5

Title: New Web Book
Author: umer
Publication Year: 2021
Quantity Available: 2

Databaase Table

```sql
SELECT * FROM `books`
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 ⌄   Filter rows: [Search this table]   Sort by key: [None ⌄]

Extra options

				id	title	author	publication_year	quantity_available
☐	🖉 Edit	Copy	⊖ Delete	14	Web	Umer	2019	5
☐	🖉 Edit	Copy	⊖ Delete	15	web programming	WIlley	2022	4
☐	🖉 Edit	Copy	⊖ Delete	16	New Web Book	umer	2021	2