



Lab 01

Web Engineering II

NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

LAB 01

PHP Pagination

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Lab Objectives:

1. Revise Database concepts in MySQL
2. Apply pagination on PHP Database

Software Required:

- vscode

Creating Pagination with PHP and MySQL

PHP Pagination

PHP is mostly used to store and display data from a database. Pagination can be done with ajax, but here this is done with non-ajax. In this tutorial, we will learn the pagination in PHP with MySQL. Let's take a brief review about pagination with an example

Pagination is a common task for PHP developers. MySQL helps the developer to create pagination by using LIMIT clause, which takes two arguments. The first argument as OFFSET and the second argument is number of records that will return from database.

Simple steps to create pagination -

- Create a database and table. Provide a list of 100 records into the table.
- Connect with the MySQL database.
- Create the pagination link to split the data on multiple pages and add them to bottom of the table.
- Fetch data from the database and display it to the multiple pages.

Follow the following steps:

Database creation

1. First of all, create a database named by **taskManager** as we created and a table inside it named **tasks**. Create attribute by name **taskID** and **taskName**, and provide the data in the table.
2. Insert 100 records in the database.

Create a Connection File

Create a connection File databaseConnect.php

```
<?php
    $servername = "localhost";
    $username = "root";
    $password = "";
    $database = "TaskManager";
    // Create connection
    $conn = new mysqli($servername, $username, $password, $database);
    // Check connection
    if ($conn->connect_error) {
        die("Connection failed: " . $conn->connect_error);
    }

    // Connected successfully

?>
```

Create index.php

Create index file and include the dbconnection file:

```
<?php

include('databaseConnect.php');

?>
```

Get the current page number

```
1. if (!isset($_GET['page'])) {
2.     $page = 1;
3. } else {
4.     $page = $_GET['page'];
5. }
```

Formula for pagination

For pagination, you need to set the limit of number of records to be displayed per page. Here, we set the limit for result per page to 10, so it will display on each page

```
$results_per_page = 10;
$page_first_result = ($page-1) * $results_per_page;
```

Get total number of pages

```
// Get total number of pages
$query = "select * from tasks";
$result = mysqli_query($conn, $query);
$number_of_result = mysqli_num_rows($result);

//determine the total number of pages available
$number_of_page = ceil ($number_of_result / $results_per_page);
```

Retrieve Data on web page

```
<center>
<table height = "50" cellpadding =10px width=80% border = "1" >
<tr> <th>taskID</th> <th>Task Name</th> </tr>
    <?php
$query = "SELECT *FROM tasks LIMIT " . $page_first_result . ',' . $results_per_page;
$result = mysqli_query($conn, $query);

while ($row = mysqli_fetch_array($result))
{
    echo "<tr style = 'background-color : #FFFFE0'>
    <td>",$row['taskID'], "</td><td>",$row['taskName'], "
    <td colspan=\"8\" style='display:none;' ",$row['taskName'],""></td>
```

```

        </tr>";
    }
    ?>
</table>
Display the link of the pages in URL

//Display the link of the pages in URL

for($page = 1; $page<= $number_of_page; $page++) {
    echo '<a href = "index.php?page=' . $page . '">' . $page . ' </a>     &
nbsp'; }

?>

</center>

```

Final Output

taskID	Task Name
11	Important Task
12	Important Task
13	Important Task
14	Important Task
15	Important Task
16	Important Task
17	Important Task
18	Important Task
19	Important Task
20	Important Task

[1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [11](#)

Lab Tasks:

1. Follow the above tutorial.
2. Create a record of 50 tasks and display the record in 10 pages. Provide the relevant code and output.
3. Style the page links [1, 2 ,3 ,4 ...] with different hover effects.