PHP

IK230 - DESAIN DAN PEMROGRAMAN WEB

Outline Materi

- Session
- Cookies
- Upload
- Download

REFERENSI

1. Joel Murach, Ray Harris, "Murach's PHP and MySQL", Mike Murach & Associates, 2010
2. http://www.w3schools.com/
3. https://www.php.net/manual/en/

Cookies

- A cookie is merely a small file that the web server stores on the hard drive of the client's machine
- Each time the same computer requests a page with a browser, it will send the cookie too
- Cookies have names (to identify them) and value
- They can also have expiry, location, and security settings, but these settings are optional

Create Cookies

```
setcookie(name, value, expire, path, domain, secure, httponly);
```

Cookies Examples

Create Cookies

```
setcookie(name, value, expire, path, domain, secure, httponly);
```

```php
<!DOCTYPE html>
<?php
$cookie_name = "user";
$cookie_value = "John Doe";
setcookie($cookie_name, $cookie_value, time() + (86400 * 30), "/"); // 86400 =
1 day
?>
<html>
<body>

<?php
if(!isset($_COOKIE[$cookie_name])) {
    echo "Cookie named '" . $cookie_name . "' is not set!";
} else {
    echo "Cookie '" . $cookie_name . "' is set!<br>";
    echo "Value is: " . $_COOKIE[$cookie_name];
}
?>

<p><strong>Note:</strong> You might have to reload the page to see the value of
the cookie.</p>

</body>
</html>
```

Cookie 'user' is set!
Value is: John Doe

Note: You might have to reload the page to see the value of the cookie.

Cookies Examples

Modify Cookies
- **using the setcookie() function**

```php
<!DOCTYPE html>
<?php
$cookie_name = "user";
$cookie_value = "Alex Porter";
setcookie($cookie_name, $cookie_value, time() + (86400 * 30), "/");
?>
<html>
<body>

<?php
if(!isset($_COOKIE[$cookie_name])) {
    echo "Cookie named '" . $cookie_name . "' is not set!";
} else {
    echo "Cookie '" . $cookie_name . "' is set!<br>";
    echo "Value is: " . $_COOKIE[$cookie_name];
}
?>

<p><strong>Note:</strong> You might have to reload the page to see the new
value of the cookie.</p>

</body>
</html>
```

Cookie 'user' is set!
Value is: Alex Porter

Note: You might have to reload the page to see the new value of the cookie.

Cookies Examples

Delete Cookies

- **use the setcookie() function with an expiration date in the past**

```php
<!DOCTYPE html>
<?php
// set the expiration date to one hour ago
setcookie("user", "", time() - 3600);
?>
<html>
<body>

<?php
echo "Cookie 'user' is deleted.";
?>

</body>
</html>
```

Cookie 'user' is deleted.

Sessions

- A session is a way to store information (in variables) to be used across multiple pages
- The session is essentially the same as the cookie, except that **it resides on the web server and not the client's machine**
- Session variables hold information about one single user, and are available to all pages in one application.
- By default, session variables last until the user closes the browser.

Start a PHP Session

- A session is started with the session_start() function.
- Session variables are set with the PHP global variable: $_SESSION.

Start a PHP Session Examples

Start a PHP Session

- A session is started with the session_start() function.
- Session variables are set with the PHP global variable: $_SESSION.

```php
set_session.php
1  <?php
2      //start the session
3      session_start();
4
5      //set session variable
6      $_SESSION['username'] = "admin";
7      $_SESSION['password'] = "pass4admin";
8
9      echo "Session berhasil dibuat !";
10
11  ?>
```

Session berhasil dibuat !

Get PHP Session Variable Values

- Get session from different page
- Beginning of each page (session_start())
- All session variable values are stored in the global $_SESSION variable

```php
display_session.php
1   <?php
2       //start the session
3       session_start();
4
5       //set session variable
6       $_SESSION['username'] = "admin";
7       $_SESSION['password'] = "pass4admin";
8
9       // echo session variable
10      echo "Username = " . $_SESSION['username'] . "<br/>";
11      echo "Password = " . $_SESSION['password'];
12
13  ?>
```

Username = admin
Password = pass4admin

Modify a PHP Session Variable

- Just modify the session variable

```php
<?php
    //start the session
    session_start();

    //set session variable
    $_SESSION['username'] = "admin";
    $_SESSION['password'] = "pass4admin";

    // modify session data
    $_SESSION['username'] = "administrator";
    $_SESSION['password'] = "pass4dm1n123";
    // print_r($_SESSION);

    // echo session variable
    echo "<br/>Username = " . $_SESSION['username'] . "<br/>";
    echo "Password = " . $_SESSION['password'];
?>
```

Username = administrator
Password = pass4dm1n123

Destroy a PHP Session

- To remove all global session variables and destroy the session, use **session_unset()** and **session_destroy()**:

```php
remove_session.php
<?php
    //start the session
    session_start();

    //set session variable
    $_SESSION['username'] = "admin";
    $_SESSION['password'] = "pass4admin";

    // remove all session variables
    session_unset();
    // destroy the session
    session_destroy();

    // echo session variable
    echo "<br/>Username = " . $_SESSION['username'] . "<br/>";
    echo "Password = " . $_SESSION['password'];

?>
```

Notice: Undefined index: username in **C:\xampp\htdocs\lat_php2\remove_session.php** on line 15

Username =

Notice: Undefined index: password in **C:\xampp\htdocs\lat_php2\remove_session.php** on line 16
Password =

Session is deleted

Contoh Session dan Cookies pada Proses Login

- Buatlah halaman form login seperti di bawah ini, kemudian simpan file dengan nama **index.php**


```php
<?php
  session_start(); // Start session

  // cek session untuk memeriksa user telah login atau belum
  if(isset($_SESSION['username'])){ // Jika tidak ada session username
      header("location: welcome.php"); //  Redirect ke halaman welcome.php
  }
?>

<html>
<head>
  <title>Login</title>
</head>
<body>
  <h1>Silahkan login </h1>

  <div style="color: red;margin-bottom: 15px;">
    <?php
      // Cek apakah terdapat cookie dengan nama message
      if(isset($_COOKIE["message"])){ // Jika ada
        echo $_COOKIE["message"]; // Tampilkan pesannya
      }
    ?>

  </div>

  <form method="post" action="login.php">
    <label>Username</label><br>
    <input type="text" name="username" placeholder="Username"/><br><br>

    <label>Password</label><br>
    <input type="password" name="password" placeholder="Password"/><br><br>

    <input type="submit" name="login" value="Login"/>
    <input type="reset" name="cancel" value="Batal"/>
  </form>
</body>
```

Contoh Session dan Cookies pada Proses Login (2)

- Buatlah table account yang berisi data username dan password login
- Kemudian isi data table tersebut

Contoh Session dan Cookies pada Proses Login (3)

- Buatlah halaman **login.php** untuk membaca data inputan username dan password. Kemudian data tersebut dicocokan dengan data dari database.

```php
in > 🐘 login.php
<?php
    session_start(); // Start session nya
    include ("config.php");

    $username = $_POST['username'];
    $password = $_POST['password'];
    $password_md5 = md5($password); // Kita enkripsi (encrypt) password tadi dengan md5

    if ($username != '' && $password != ''){
        // Buat query untuk mengecek apakah ada data user dengan username dan password yang dikirim dari form
        $sql = "SELECT * FROM account WHERE username='$username' AND password='$password_md5'";
        $query = mysqli_query($conn, $sql);
        $data = mysqli_fetch_assoc($query); // Ambil datanya dari hasil query tadi

        if(mysqli_num_rows($query) < 1){
            // Buat sebuah cookie untuk menampung data pesan kesalahan
            setcookie("message", "Maaf, Username atau Password salah", time()+60);
            header("location: index.php"); // Redirect kembali ke halaman index.php
        }else{
            echo $data['username'] . $data['password'];

            $_SESSION['username'] = $data['username']; // Set session username dan isi dari data username
            $_SESSION['nama'] = $data['nama']; // Set session nama dan isi dari data nama

            setcookie("message","",time()-60); // delete cookie message
            header("location: welcome.php"); // redirect ke halaman welcome.php
        }
    } else {
        setcookie("message", "Username atau Password kosong", time()+60);
        header("location: index.php"); // Redirect kembali ke halaman index.php
    }
?>
```

Contoh Session dan Cookies pada Proses Login (4)

- Buatlah halaman **welcome.php,** halaman ini akan muncul ketika user berhasil melakukan login

```php
_login > 🐘 welcome.php
<?php
    session_start(); // Start session nya

    // cek session untuk memeriksa user telah login atau belum
    if( ! isset($_SESSION['username'])){ // Jika tidak ada session username
        header("location: index.php"); // Kita Redirect ke halaman login.php
    }
?>


<html>
<head>
    <title>Halaman Setelah Login</title>
</head>
<body>
    <h1>Selamat datang <?php echo $_SESSION['nama']; ?></h1>
    <h4>Anda berhasil login ke dalam aplikasi</h4>

    <a href="logout.php">Logout</a>
</body>
</html>
```

Contoh Session dan Cookies pada Proses Login (5)

- Halaman **logout.php** yang berisi fungsi untuk menghapus session yang telah dibuat saat proses login

```php
_login > 🐘 logout.php
<?php
    session_start(); // Start session nya
    session_destroy(); // Hapus semua session
    header("location: index.php"); // Redirect ke halaman index.php
?>
```

Upload

- Buat Form **upload.php**
- Pastikan form memiliki atribu**t enctype = "multipart / form-data"** agar proses upload dapat dilakukan
- Input file upload dibuat dengan tipe file

Upload File

File	Choose File No file chosen
Deskripsi File	

Upload Batal
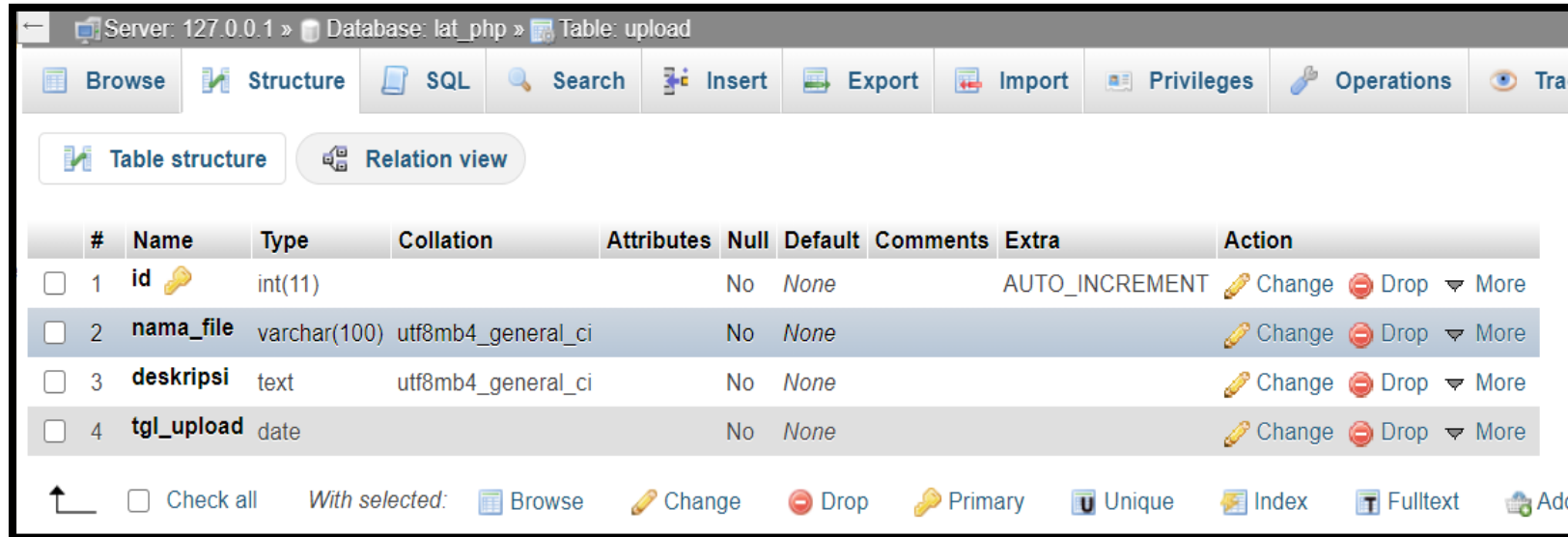
```
form_upload.php
1   <html>
2       <head>
3           <title> Form Upload </title>
4       </head>
5   <body>
6       <form method = "post" action = "proses_upload.php" enctype="multipart/form-data">
7           <p><h1>Upload File</h1></p>
8           <table width = "600" border = "0" cellspacing = "1" cellpadding = "2">
9               <tr>
0                   <td width = "250">File</td>
1                   <td>
2                       <input name = "fupload" type = "file" id = "fupload">
3                   </td>
4               </tr>
5               <tr>
6                   <td width = "250">Deskripsi File</td>
7                   <td>
8                       <textarea name = "desc" id = "desc" rows="5" cols="50"></textarea>
9                   </td>
0               </tr>
1               <tr>
2                   <td width = "250"> </td>
3                   <td> </td>
4               </tr>
5               <tr>
6                   <td width = "250"> </td>
7                   <td>
8                       <input name = "upload" type = "submit" id = "upload"  value = "Upload">
9                       <input name = "cancel" type = "submit" id = "cancel"  value = "Batal">
0                   </td>
1               </tr>
2           </table>
3       </form>
4   </body>
5   </html>
```
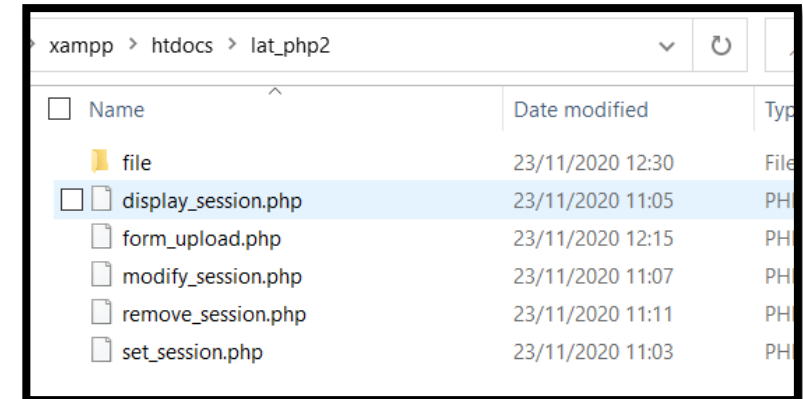
Upload (2)

- Buat table upload seperti di bawah ini

- Buat direktori untuk menyimpan file yang telah berhasil diupload, contoh : file

Upload (3)

- Buat file **proses_upload.php**

  - $ _FILES global akan berisi semua informasi file yang diunggah.
  - *$_FILES['userfile']['name']* : *mendapatkan informasi nama file yang diunggah*
  - *$_FILES['userfile']['type']* : *mendapatkan informasi mime type file, contoh : image/gif.*
  - *$_FILES['userfile']['size']* : *mendapatkan informasi ukuran file yang diunggah dalam satuan byte*

```php
proses_upload.php
<?php
    include("config.php");

    if (isset($_POST['upload'])) {
        date_default_timezone_set("Asia/Jakarta");
        $tgl = date("Ymd");
        // ambil informasi dari file yang diupload
        $tmp_file = $_FILES['fupload']['tmp_name'];
        $nm_file = $_FILES['fupload']['name'];
        $ukuran_file = $_FILES['fupload']['size'];
        $desc = $_POST['desc'];

        $size = 10000000; // limit 10 MB
    }

    if($ukuran_file > $size){
        echo "<strong>Gagal upload! <br>Ukuran Maksimal 10MB, saat ini ukuran file ".$ukuran_file."</strong>";
        echo "<a href='index.php'>Upload ulang</a>";
        exit();
    } else {
        if($nm_file){
            // alamat direktori yang digunakan untuk menyimpan hasil upload
            $dir = "file/$nm_file";
            move_uploaded_file($tmp_file, $dir);

            $sql = "INSERT INTO upload(nama_file, deskripsi, tgl_upload) VALUES('$nm_file','$desc','$tgl')";
            $query = mysqli_query($conn, $sql) or die (mysqli_error($conn));

            echo "<strong>$nm_file</strong> berhasil di upload!";
            echo "<br>";
            echo "<a href='home.php'>Lihat Data</a>";
        } else {
            echo "Gagal upload!";
            echo "<br>";
            echo "<a href='form_upload.php'>Upload ulang</a>";
        }
    }
?>
```

Upload (4)

- *$_FILES['userfile']['tmp_name'] : memberikan informasi nama file sementara dari file tempat file yang diunggah disimpan*
- *$_FILES['userfile']['error'] : memberikan informasi error yang terjadi pada proses unggah file*

- *move_uploaded_file : memindahkan file yang diunggah ke suatu lokasi.*
- *Perintah : move_uploaded_file(filename, location)*

```php
<?php
    include("config.php");

    if (isset($_POST['upload'])) {
        date_default_timezone_set("Asia/Jakarta");
        $tgl = date("Ymd");
        // ambil informasi dari file yang diupload
        $tmp_file = $_FILES['fupload']['tmp_name'];
        $nm_file = $_FILES['fupload']['name'];
        $ukuran_file = $_FILES['fupload']['size'];
        $desc = $_POST['desc'];

        $size = 10000000; // limit 10 MB

        // echo $ukuran_file;

        if($ukuran_file > $size){
            echo "<p>Gagal upload! <br/>Ukuran Maksimal 10MB, saat ini ukuran file ".$ukuran_file."</p>";
            echo "<a href='index.php'>Upload ulang</a>";
            exit();
        } else {
            if($nm_file){
                // alamat direktori yang digunakan untuk menyimpan hasil upload
                $dir = "file/$nm_file";
                move_uploaded_file($tmp_file, $dir);

                $sql = "INSERT INTO upload(nama_file, deskripsi, tgl_upload) VALUES('$nm_file','$desc','$tgl')";
                $query = mysqli_query($conn, $sql) or die (mysqli_error($conn));

                echo "<strong>$nm_file</strong> berhasil di upload!";
                echo "<br>";
                echo "<a href='home.php'>Lihat Data</a>";
            } else {
                echo "Gagal upload!";
                echo "<br>";
                echo "<a href='form_upload.php'>Upload ulang</a>";
            }
        }
    }
?>
```

Upload

Upload File

File	Choose File SERTIFIKA...001-2015.pdf
Deskripsi File	Sertifikat ISO Departemen Pendidikan Ilmu Komputer UPI 2020

Upload Batal

File berada pada direktori

OS (C:) > xampp > htdocs > lat_php2 > file

SERTIFIKAT ISO
9001-2015

Data file tersimpan di table

SERTIFIKAT ISO 9001-2015.pdf berhasil di upload!

Lihat Data

Upload File Berhasil

Download

- Buatlah file baru yang berisi list file download, misalnya **home.php**
- Tambahkan link download untuk melakukan download. Link tersebut ditambahkan dengan parameter nama file dan isi value-nya dari data table, parameter ini akan digunakan untuk proses download.

Data File

Tambah Data

No	Nama File	Deskripsi	Tanggal Upload	Aksi
1	SERTIFIKAT ISO 9001-2015.pdf	Sertifikat ISO Departemen Pendidikan Ilmu Komputer UPI 2020	2020-11-23	Download

```php
<?php
include ('config.php');

$sql = 'SELECT * FROM upload ORDER BY id DESC';
$result = mysqli_query($conn, $sql);

if(!$result ) {
    die('Could not get data: ' . mysqli_error());
}

echo "<p><h1>Data File</h1></p>";
echo "<p><a href='form_upload.php'>Tambah Data</a></p>";
echo "<table  width = '850' border='1'>
        <tr>
            <td>No</td>
            <td>Nama File</td>
            <td>Deskripsi</td>
            <td>Tanggal Upload</td>
            <td colspan='2'>Aksi</td>
        </tr>";

$i = 1;
while($row = mysqli_fetch_assoc($result)) {
    // print_r($row);
    echo "<tr>";
    echo "<td> $i </td>";
    echo "<td> {$row['nama_file']} </td>";
    echo "<td> {$row['deskripsi']} </td>";
    echo "<td> {$row['tgl_upload']} </td>";
    echo "<td> <a href='download.php?file_name={$row['nama_file']}'> Download </a></td>";
    echo "</tr>";
    $i++;
}
echo"</table>";
mysqli_close($conn);
?>
```

Download

- Buatlah file dengan nama **download.php** untuk proses download
- **fopen():** digunakan untuk membuka file dari suatu lokasi(url). Parameter yang dibutuhkan untuk fungsi ini adalah lokasi file dan mode/tipe akses yang digunakan untuk file yang akan dibuka, contoh 'r' untuk tipe akses read-only.
- **filesize():** digunakan untuk memberikan informasi ukuran file
- **pathinfo():** digunakan untuk memberikan informasi terkait path dari suatu file. Value yang dihasilkan berupa associative array yang berisi dirname, basename, extension dan filename

```php
<?php
    include("config.php");

    $path = "file/"; // nama direktori tempat menyimpan file yang diupload
    $full_path = $path.$_GET['file_name'];

    if ($fd = fopen ($full_path, "r")) {
        $fsize = filesize($full_path);
        $path_parts = pathinfo($full_path);
        $ext = strtolower($path_parts["extension"]);
        switch ($ext) {
            case "pdf":
                header("Content-type: application/pdf");
                // gunakan 'attachment' yang menunjukan file harus diunduh
                header("Content-Disposition: attachment; filename=\"".$path_parts["basename"]."\"");
            break;
            // menambah header lain untuk jenis content type selain application/pdf
            default;
                header("Content-type: application/octet-stream");
                header("Content-Disposition: filename=\"".$path_parts["basename"]."\"");
            break;
        }
        header("Content-length: $fsize");
        while(!feof($fd)) {
            $buffer = fread($fd, 2048);
            echo $buffer;
        }
    }
    fclose ($fd);
    exit;
?>
```

Download

- **feof() :** digunakan untuk memeriksa apakah pointer telah mencapai "end-of-file" untuk membuka suatu file. Fungsi ini dapat digunakan dengan fungsi looping
- **fread():** digunakan untuk membaca isi file yang terbuka. Fungsi ini akan membaca isi file sepanjang jumlah maksimum byte yang dibaca, contoh 2048 byte.
- **fclose() :** digunakan untuk menutup file yang terbuka

```php
<?php
    include("config.php");

    $path = "file/"; // nama direktori tempat menyimpan file yang diupload
    $full_path = $path.$_GET['file_name'];

    if ($fd = fopen ($full_path, "r")) {
        $fsize = filesize($full_path);
        $path_parts = pathinfo($full_path);
        $ext = strtolower($path_parts["extension"]);
        switch ($ext) {
            case "pdf":
                header("Content-type: application/pdf");
                // gunakan 'attachment' yang menunjukan file harus diunduh
                header("Content-Disposition: attachment; filename=\"".$path_parts["basename"]."\"");
            break;
            // menambah header lain untuk jenis content type selain application/pdf
            default;
                header("Content-type: application/octet-stream");
                header("Content-Disposition: filename=\"".$path_parts["basename"]."\"");
            break;
        }
        header("Content-length: $fsize");
        while(!feof($fd)) {
            $buffer = fread($fd, 2048);
            echo $buffer;
        }
    }
    fclose ($fd);
    exit;
?>
```

Download

- **Content-type** : Menunjukkan jenis media sumber data.
- **Content-disposition**: digunakan untuk proses download file. Fungsi ini menunjukan apakah data yang dikirimkan harus ditampilkan secara inline, atau ditangani sebagai attachment (data harus di download dan simpan di local) dan browser harus menampilkan dialog "save as". Fungsi ini adalah general header dan harus ada ketika terdapat data dengan atribut multipart/form-data.

```php
<?php
    include("config.php");

    $path = "file/"; // nama direktori tempat menyimpan file yang diupload
    $full_path = $path.$_GET['file_name'];

    if ($fd = fopen ($full_path, "r")) {
        $fsize = filesize($full_path);
        $path_parts = pathinfo($full_path);
        $ext = strtolower($path_parts["extension"]);
        switch ($ext) {
            case "pdf":
                header("Content-type: application/pdf");
                // gunakan 'attachment' yang menunjukan file harus diunduh
                header("Content-Disposition: attachment; filename=\"".$path_parts["basename"]."\"");
            break;
            // menambah header lain untuk jenis content type selain application/pdf
            default;
                header("Content-type: application/octet-stream");
                header("Content-Disposition: filename=\"".$path_parts["basename"]."\"");
            break;
        }
        header("Content-length: $fsize");
        while(!feof($fd)) {
            $buffer = fread($fd, 2048);
            echo $buffer;
        }
    }
    fclose ($fd);
    exit;
?>
```

Download

- **Content-length**: menunjukan besarnya data yang dikirmkan dibuat dalam satuan bytes

```php
<?php
    include("config.php");

    $path = "file/"; // nama direktori tempat menyimpan file yang diupload
    $full_path = $path.$_GET['file_name'];

    if ($fd = fopen ($full_path, "r")) {
        $fsize = filesize($full_path);
        $path_parts = pathinfo($full_path);
        $ext = strtolower($path_parts["extension"]);
        switch ($ext) {
            case "pdf":
                header("Content-type: application/pdf");
                // gunakan 'attachment' yang menunjukan file harus diunduh
                header("Content-Disposition: attachment; filename=\"".$path_parts["basename"]."\"");
            break;
            // menambah header lain untuk jenis content type selain application/pdf
            default;
                header("Content-type: application/octet-stream");
                header("Content-Disposition: filename=\"".$path_parts["basename"]."\"");
            break;
        }
        header("Content-length: $fsize");
        while(!feof($fd)) {
            $buffer = fread($fd, 2048);
            echo $buffer;
        }
    }
    fclose ($fd);
    exit;
?>
```

Delete File Download

- Tambahkan suatu link untuk melakukan proses delete pada halaman home.php
- Tambahkan link download untuk melakukan hapus file. Link tersebut ditambahkan dengan parameter:
  - file_name
  - id_file

```php
e.php
<?php
   include ('config.php');

   $sql = 'SELECT * FROM upload ORDER BY id DESC';
   $result = mysqli_query($conn, $sql);

   if(!$result ) {
      die('Could not get data: ' . mysqli_error());
   }

   echo "<p><h1>Data File</h1></p>";
   echo "<p><a href='form_upload.php'>Tambah Data</a></p>";
   echo "<table  width = '850' border='1'>
         <tr>
            <td>No</td>
            <td>Nama File</td>
            <td>Deskripsi</td>
            <td>Tanggal Upload</td>
            <td colspan='2'>Aksi</td>
         </tr>";

   $i = 1;
   while($row = mysqli_fetch_assoc($result)) {
      // print_r($row);
      echo "<tr>";
      echo "<td> $i </td>";
      echo "<td> {$row['nama_file']} </td>";
      echo "<td> {$row['deskripsi']} </td>";
      echo "<td> {$row['tgl_upload']} </td>";
      echo "<td> <a href='download.php?file_name={$row['nama_file']}'> Download </a></td>";
      echo "<td> <a href='delete_file.php?file_name={$row['nama_file']}&id_file={$row['id']}'> Delete</a></td
      echo "</tr>";
      $i++;
   }
   echo"</table>";
   mysqli_close($conn);
?>
```

Delete File Download

- Buat file baru dengan nama **delete_file.php**
- Pada file ini dibuat kode untuk menghapus data file dari table berdasarkan id_file yang dikirimkan pada link dan menghapus file dari directory
- Fungsi **unlink** digunakan untuk menghapus file. Parameter yang dibutuhkan adalah path file yang akan dihapus

```php
delete_file.php
<?php
    include('config.php');

    // PHP function to delete file
    $path = "file/";
    $id_file = $_GET['id_file'];

    // hapus data dari table
    $sql = "DELETE from upload WHERE id=$id_file";
    $query = mysqli_query($conn, $sql);

    if( $query ){
        //hapus data dari direktori
        unlink($path.$_GET['file_name']);
        header("Location: home.php");
    } else {
        die("data gagal menghapus...");
    }
?>
```