

Pemrograman Web Berbasis Framework



Pertemuan 8 : Penanganan File dan Image

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Pokok Bahasan

- Pendahuluan
- File helper
- Download helper
- File upload class
- Image manipulation class

TIK :

Setelah mengikuti kuliah ini mahasiswa dapat mengetahui dan memahami penanganan file dan image pada Web Framework



Pendahuluan

- Seringkali aplikasi web berhubungan dengan file baik dalam hal membuat dan membaca file, menyimpan data setitng, log maupun membuat file bagi keperluan pengunjung
- Penanganan terhadap file meliputi :
 - Membaca file
 - Membuat file
 - Mendapatkan informasi seputar file (ukuran, jenis, waktu,dll)
 - Membaca daftar file dalam suatu direktori



Pendahuluan (2)

- Untuk mengaktifkan layanan file dilakukan dengan cara me-load helper file dengan dua metode :
 - Melalui autoload.php
 - `$autoload['helper'] = array('file');`
 - Secara manual
 - `$this->load->helper('file');`



File Helper

1. Membaca file, contoh :

```
$string = read_file('fileku.txt');  
echo $string;
```

- Default path dalam file helper adalah sama dengan index.php (root folder).
- Jika file tsb terdapat di system/application maka akan menjadi :

```
$string = read_file('system/application/fileku.txt');  
echo $string;
```



File Helper (2)

2. Menulis teks ke file, format:

```
write_file('path', $data)
```

Contoh penerapan :

```
$data = 'Ini adalah teks yang dituliskan ke file';  
if ( ! write_file('fileku.txt', $data) )  
{  
    echo 'File gagal ditulis';  
} else {  
    echo 'File berhasil ditulis';  
}
```



File Helper (3)

3. Menghapus file, format:

```
delete_files('path')
```

– Contoh penerapan :

```
delete_files('system/application/files/');
```

– Jika dalam folder tersebut terdapat sub-folder, dan akan menghapus file beserta subfolder di dalamnya, maka gunakan parameter TRUE

– Contoh :

```
delete_files('system/application/files/', TRUE);
```



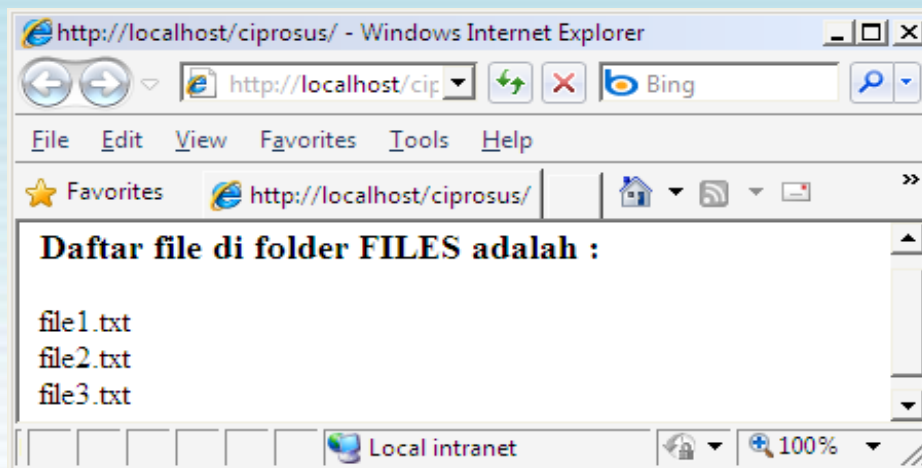
File Helper (4)

4. Membaca isi folder file, format:

```
get_filenames('path/to/directory/')
```

– Contoh penerapan :

```
echo "<h3>Daftar file di folder FILES adalah :</h3>";  
$data = get_filenames('system/application/files/');  
foreach ($data as $df)  
{  
    echo $df."<br>";  
}
```





Download Helper

- Untuk mengaktifkan layanan download dilakukan dengan cara me-load helper download dengan dua metode :
 - Melalui autoload.php
 - `$autoload['helper'] = array('download');`
 - Secara manual
 - `$this->load->helper('download');`



Download Helper (2)

- Melakukan proses download dari suatu data yang dijadikan file.
- Contoh :

```
$this->load->helper('download');  
$data = 'Ini adalah data yang dituliskan ke  
file dan didownload';  
$nama_file = 'tes_file.txt';  
force_download($nama_file, $data);
```



Download Helper (3)

- Melakukan proses download dari suatu file yang telah ada di server.
- Contoh :

```
$this->load->helper('download');  
$data = file_get_contents("fileku.pdf");  
$nama_file = 'fileku.pdf';  
force_download($nama_file, $data);
```



File Upload Class

- Class file upload digunakan untuk proses upload file dari komputer lokal ke server
- Untuk melakukan upload diperlukan form dengan jenis input type=file
- Penyajian form tersebut dapat melibatkan view
- Setelah proses upload, perlu konfirmasi proses upload berhasil atau gagal



File Upload Class (2)

- Contoh kode pada View 'upload_form.php' :

```
<html>
<head>
<title>Form Upload</title>
</head>
<body>
<?php echo $error;?>
<?php echo form_open_multipart('upload/do_upload');?>
<input type="file" name="userfile" size="20" />
<br /><br />
<input type="submit" value="upload" />
</form>
</body>
</html>
```



File Upload Class (3)

- Contoh kode pada View 'upload_success.php' :

```
<html>
<head>
<title>Form Upload</title>
</head>
<body>
<h3>File Berhasil Terupload</h3>
<ul>
<?php foreach($upload_data as $item => $value):?>
<li><?php echo $item;?>: <?php echo $value;?></li>
<?php endforeach; ?>
</ul>
<p><?php echo anchor('upload', 'Upload File Lain'); ?></p>
</body>
</html>
```



File Upload Class (4)

- Contoh kode pada Controller 'upload.php' :

```
<?php
class Upload extends Controller {
function Upload() { parent::Controller(); }
function index() {
    $this->load->view('upload_form', array('error' => ' ' ));
}
function do_upload() {
    $config['upload_path'] = './uploads/';
    $config['allowed_types'] = 'gif|jpg|png';
    $config['max_size'] = '100';
    $this->load->library('upload', $config);
    if ( ! $this->upload->do_upload() ) {
        $error = array('error' => $this->upload->display_errors());
        $this->load->view('upload_form', $error);
    } else {
        $data = array('upload_data' => $this->upload->data());
        $this->load->view('upload_success', $data);
    }
}
}
?>
```



Image Manipulation Class

- Image manipulation class merupakan class dalam CodeIgniter yang digunakan untuk melakukan manipulasi image (gambar).
- Pemanggilan class :

```
$this->load->library('image_lib');
```
- Ruang lingkup manipulasi image yang dapat ditangani :
 - *Image Resizing* (manipulasi ukuran image)
 - *Thumbnail Creation* (pembuatan thumbnail image)
 - *Image Cropping* (pemotongan suatu image)
 - *Image Rotating* (pemerataan suatu image)
 - *Image Watermarking* (pemberian watermark)



Image Manipulation Class (2)

- *Image Resizing* (manipulasi ukuran image)
- Contoh kode program :

```
$config['image_library'] = 'gd2';  
$config['source_image'] =  
'/path/to/image/mypic.jpg';  
$config['width'] = 100;  
$config['height'] = 100;  
  
$this->load->library('image_lib', $config);  
$this->image_lib->resize();
```



Image Manipulation Class (3)

- *Thumbnail Creation* (pembuatan thumbnail image)
- Contoh kode program :

```
$config['image_library'] = 'gd2';  
$config['source_image'] = '/path/to/image/mypic.jpg';  
$config['create_thumb'] = TRUE;  
$config['maintain_ratio'] = TRUE;  
$config['width'] = 75;  
$config['height'] = 50;  
  
$this->load->library('image_lib', $config);  
$this->image_lib->resize();
```



Image Manipulation Class (4)

- *Image Cropping* (pemotongan suatu image)
- Contoh kode program :

```
$config['image_library'] = 'imagemagick';  
$config['library_path'] = '/usr/X11R6/bin/';  
$config['source_image'] = '/path/to/image/mypic.jpg';  
$config['x_axis'] = '100';  
$config['y_axis'] = '60';  
  
$this->image_lib->initialize($config);  
if ( ! $this->image_lib->crop() ) {  
    echo $this->image_lib->display_errors();  
}
```



Image Manipulation Class (5)

- *Image Rotating* (pemutaran suatu image)
- Contoh kode program :

```
$config['image_library'] = 'netpbm';  
$config['library_path'] = '/usr/bin/';  
$config['source_image'] = '/path/to/image/mypic.jpg';  
$config['rotation_angle'] = '90';  
  
$this->image_lib->initialize($config);  
if ( ! $this->image_lib->rotate()  
{  
    echo $this->image_lib->display_errors();  
}
```



Image Manipulation Class (6)

- *Image Watermarking* (pemberian watermark)
- Contoh kode program :

```
$config['source_image'] = '/path/to/image/mypic.jpg';  
$config['wm_text'] = 'Copyright 2006 - John Doe';  
$config['wm_type'] = 'text';  
$config['wm_font_path'] = './system/fonts/texb.ttf';  
$config['wm_font_size'] = '16';  
$config['wm_font_color'] = 'ffffff';  
$config['wm_vrt_alignment'] = 'bottom';  
$config['wm_hor_alignment'] = 'center';  
$config['wm_padding'] = '20';  
  
$this->image_lib->initialize($config);  
$this->image_lib->watermark();
```



Referensi :

- Wardana, ***Menjadi Master PHP dengan Framework CodeIgniter***, Elexmedia Komputindo, Jakarta, 2010.
- **CodeIgniter User Guide Version 1.7.2**