

# Pengolahan Citra dengan PHP

Nana Ramadijanti

# Mengawali...

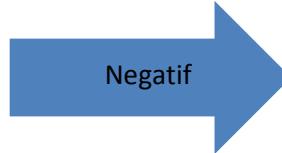
- Install server XAMPP di platform windows
- Setelah berhasil test dengan memanggil <http://localhost>, akan keluar jendela XAMPP for Windows
- Jika menggunakan XAMPP, pada saat penginstalan default drive penginstalan tidak dirubah, maka tempat penyimpanan file-file PHP diletakkan di **C:\xampp\htdocs**.
- Referensi di :  
<http://php.net/manual/en/function.imagefilter.php>

# Fungsi imagefilter di PHP

- `imagefilter(image asli, tipe filtering, [argumen])`
- Untuk tipe filtering yang dapat Anda gunakan adalah:
- - `IMG_FILTER_NEGATE`, digunakan untuk membuat image negatif
  - `IMG_FILTER_GRAYSCALE`, mengkonversi ke grayscale
  - `IMG_FILTER_BRIGHTNESS`, mengatur tingkat brightness
  - `IMG_FILTER_CONTRAST`, mengatur tingkat kontras
  - `IMG_FILTER_COLORIZE`, mengatur skala warna RGB
  - `IMG_FILTER_EDGEDETECT`, menghasilkan image dari proses edge detection
    - `IMG_FILTER_EMBOSS`, memberikan efek timbul (emboss)
    - `IMG_FILTER_GAUSSIAN_BLUR`, memberikan efek blur (Gaussian Blur)
    - `IMG_FILTER_SELECTIVE_BLUR`, memberikan efek blur (Selective Blur)
    - `IMG_FILTER_MEAN_REMOVAL`, memberikan efek sketch
    - `IMG_FILTER_SMOOTH`, memperhalus image
- Dalam hal ini, parameter ‘argumen’ sifatnya adalah optional.

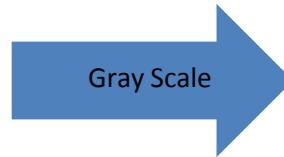
# **Membuat citra negatif**

```
<?php  
header( "Content-type: image/jpeg" );  
$image =  
imagecreatefromjpeg( 'bunga.jpg' );  
imagefilter($image,  
IMG_FILTER_NEGATE);  
imagejpeg($image); ?>
```



# *Membuat citra grayscale*

```
<?php  
header( "Content-type: image/jpeg" );  
$image =  
imagecreatefromjpeg( 'bunga.jpg' );  
imagefilter($image,  
IMG_FILTER_GRAYSCALE);  
imagejpeg($image); ?>
```



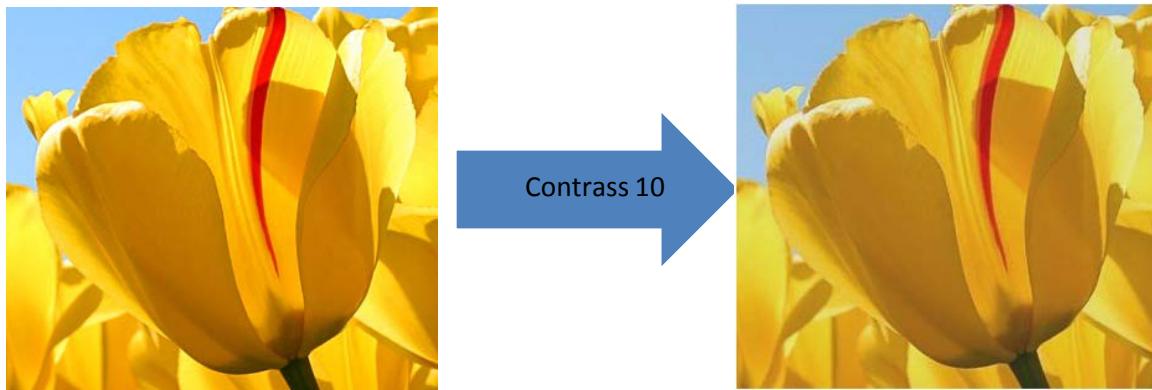
# *Mengatur tingkat brightness*

```
<?php  
header( "Content-type: image/jpeg" );  
  
$image =  
imagecreatefromjpeg( 'bunga.jpg' );  
  
imagefilter( $image,  
IMG_FILTER_BRIGHTNESS, 50 );  
imagejpeg( $image ); ?>
```



# *Mengatur tingkat contrast*

```
<?php  
header("Content-type: image/jpeg");  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_CONTRAST, 10);  
imagejpeg($image); ?>
```



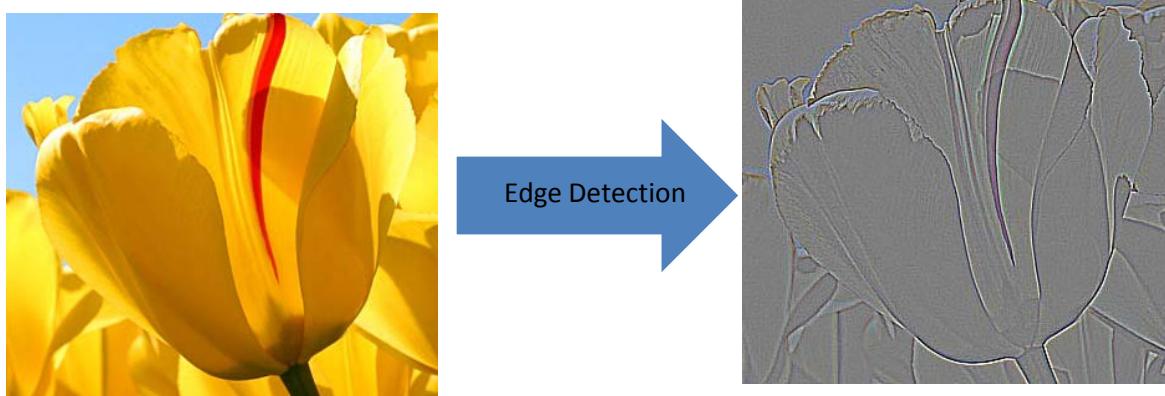
# *Mengatur skala warna RGB*

```
<?php  
header("Content-type: image/jpeg");  
  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_COLORIZE, 10, 100,  
20);  
  
imagejpeg($image); ?>
```



# *Citra dari hasil edge detection*

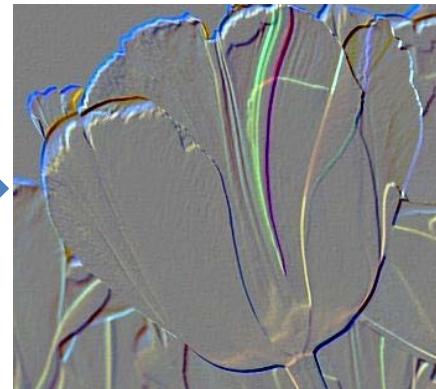
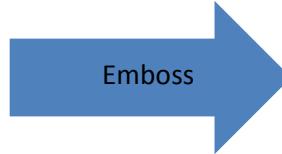
```
<?php  
header("Content-type: image/jpeg");  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_EDGEDETECT);  
imagejpeg($image); ?>
```



# *Citra dengan efek emboss*

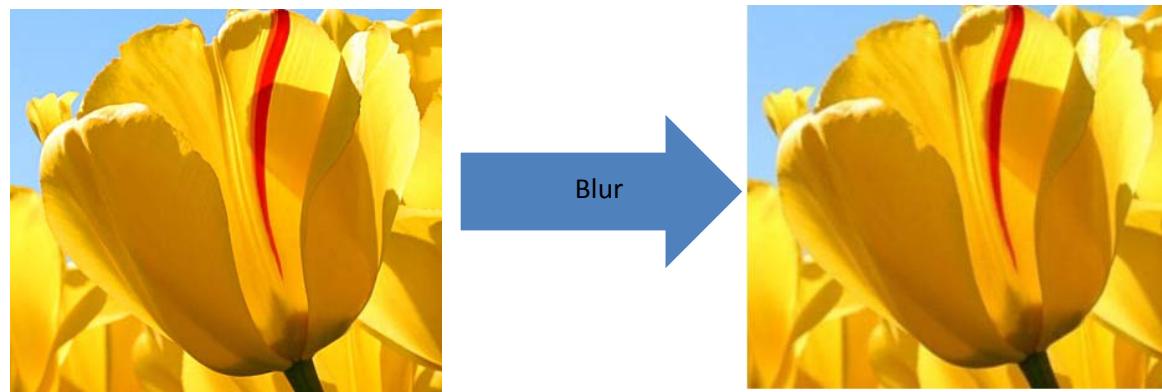
```
<?php
```

```
header("Content-type: image/jpeg");  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_EMBOSS);  
imagejpeg($image); ?>
```



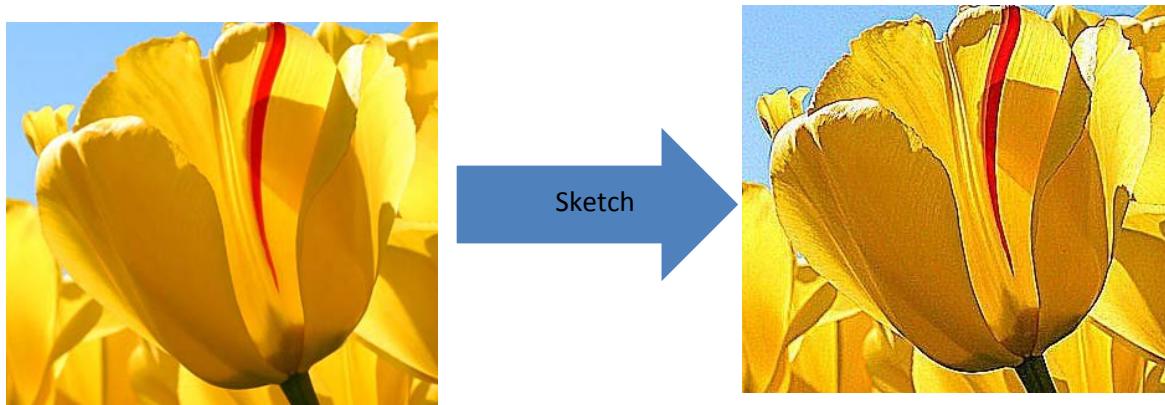
# *Citra dengan efek Gaussian blur*

```
<?php  
header("Content-type: image/jpeg");  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_GAUSSIAN_BLUR);  
imagejpeg($image); ?>
```



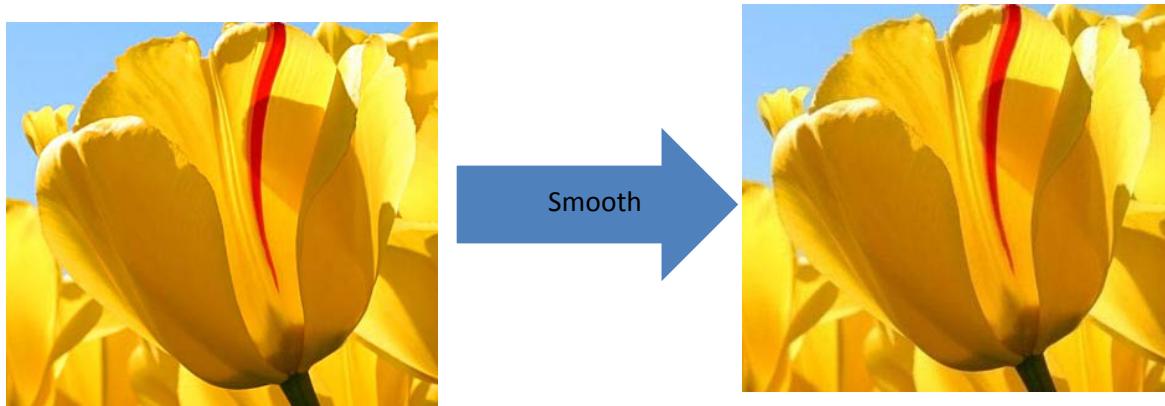
# *Citra dengan efek sketch*

```
<?php  
header("Content-type: image/jpeg");  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_MEAN_REMOVAL);  
imagejpeg($image); ?>
```



# *Mengatur tingkat kehalusan citra*

```
<?php  
header("Content-type: image/jpeg");  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_SMOOTH, 25);  
imagejpeg($image); ?>
```



# *Mengkonversi Citra ke grayscale lalu memberikan efek sketch*

```
<?php  
header("Content-type: image/jpeg");  
  
$image = imagecreatefromjpeg('bunga.jpg');  
imagefilter($image, IMG_FILTER_GRAYSCALE);  
imagefilter($image, IMG_FILTER_MEAN_REMOVAL);  
imagejpeg($image); ?>
```

