

# DRAWING IMAGES ON THE SERVER USING PHP



Prepared by,  
Ms.T.KAVITHA, M.C.A., M.Phil., B.Ed.,  
ASST. PROF. IN COMPUTER SCIENCE,  
SHRIMATI INDIRA GANDHICOLLEGE,  
TIRUCHIRAPPALLI – 2.

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# Introduction:

- PHP stands for Hypertext Preprocessor which is a server side programming language.
- PHP allows the user to create images on the server through various functions.
- Here, we see how to create graphics on the server using PHP.
- To make this work, we need to install the GD2(Graphics Diagram).

# Creating an image

Syntax:

*imagecreate(x\_size,y\_size);*

where x\_size and y\_size are the parameters in pixels.

- The first thing the code does is to call the `imagecreate()` function with the dimensions of the image, namely its width and height in that order.
- `$image=`  
*imagecreate(\$image\_width,\$image\_heihht);*

# Using Colors In PHP

- Colours are represented by three digits, known as the RGB value. The first digit denotes the red component, the second the green and the third blue, hence RGB, for Red-Green-Blue. There are 0-255 values of color components.
- Syntax:

*\$bg=imagecolorallocate(image,red,green,blue);*

# Using Header Function

- Using header function, the image's type is mentioned to the browser.

- For Example:

```
$image_height=100; $image_width=300;  
$image=  
imagecreate($image_width,$image_height);  
$bg=imagecolorallocate($image,200,200,200);  
header('Content-type:image/jpeg');  
imagejpeg($image);
```

# Various image formats

Format	Content
GIF	image/gif
JPEG	image/jpeg
PNG	image/png
WBMP	image/vnd.wap.wbmp

# To Destroy an image

- Once the image is sent to the browser, we can destroy the image using *imagedestroy* function.
- Syntax:

*imagedestroy(\$image);*

## Phpimage.php

```
<?php  
$image_height=100; $image_width=300;  
$image=imagecreate($image_width,$image_height);  
$bg=imagecolorallocate($image,200,200,200);  
header('Content-type:image/jpeg');  
imagejpeg($image);  
imagedestroy($image);  
?>
```

# Output:



# Dispalying Images in HTML Pages

- To insert an image in an html , the standard `<img>` element is embedded with the image type.
- Syntax:

```

```

We can also give the file name that is saved as `phpimage.php` that has an image of a rectangle.

# phpimage.html

```
<html>
<head>
<title>Embedding created images in HTML</title>
</head>
<body>
<h1>Embedding created images in HTML</h1>
This is a blank image created on server:
<br>

</body>
</html>
```

Output:

# Embedding created images in HTML

**This is a blank image created on server:**



# Drawing Lines

- The imageline() function can be used to draw a line to the image.
- Syntax:

`imageline(image,X1,Y1,X2,Y2, $color);`  
where X<sub>1</sub>, Y<sub>1</sub>, X<sub>2</sub> and Y<sub>2</sub> are the positions measured in pixels within the image.

# phpline.php

```
<?php
$image_height=100; $image_width=300;
$image= imagecreate($image_width,$image_height);
$bg=imagecolorallocate($image,200,200,200);
$draw_color=imagecolorallocate($image,0,0,0);
imageline($image,40,20,90,80,$draw_color);
imageline($image,30,90,250,10,$draw_color);
imageline($image,110,20,140,90,$draw_color);
header('Content-type:image/jpeg');
imagejpeg($image);
imagedestroy($image);
?>
```

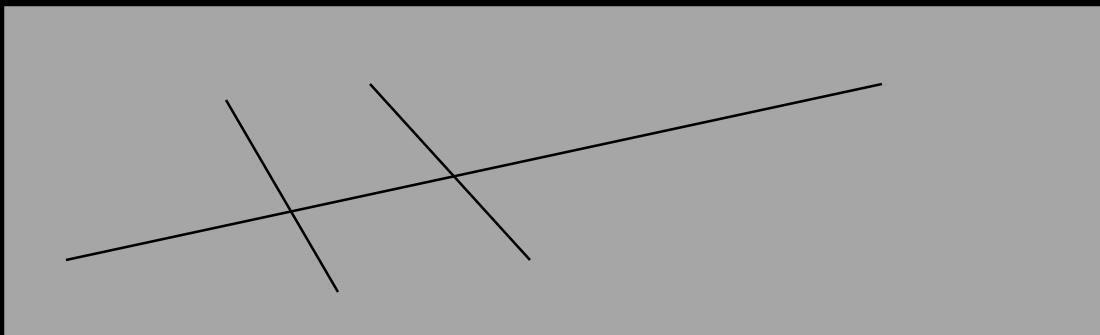
# phpline.php

```
<html>
<head>
<title>Drawing Lines</title>
</head>
<body>
<h1>Drawing Lines</h1>
These lines were drawn on the server:
<br>

</body>
</html>
```

# Drawing Lines

These lines were drawn on the server:



# Setting Line Thickness

- We can set the drawing thickness when we create an image, using the *imagesetthickness* function.

Syntax:

*imagesetthickness(image,thickness);*

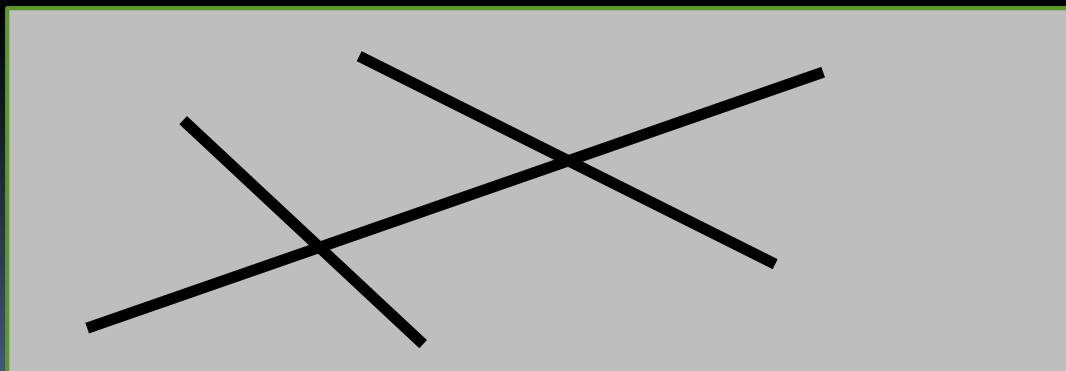
Note :

To set the thickness of lines, ranging from 1 to 6 pixels .

- The phpline.php will give an output shown below by adding after

```
$image=imagecreate($image_width,$image_height);  
imagesetthickness($image,6);
```

The output will be:



# Drawing Rectangles

- To draw the rectangles, position of upper left corner and bottom right corner are considered.
- The function creates rectangle of color in image starting at upper-left coordinate  $x_1, y_1$  and ending at bottom-right coordinate  $x_2, y_2$ .
- Syntax:

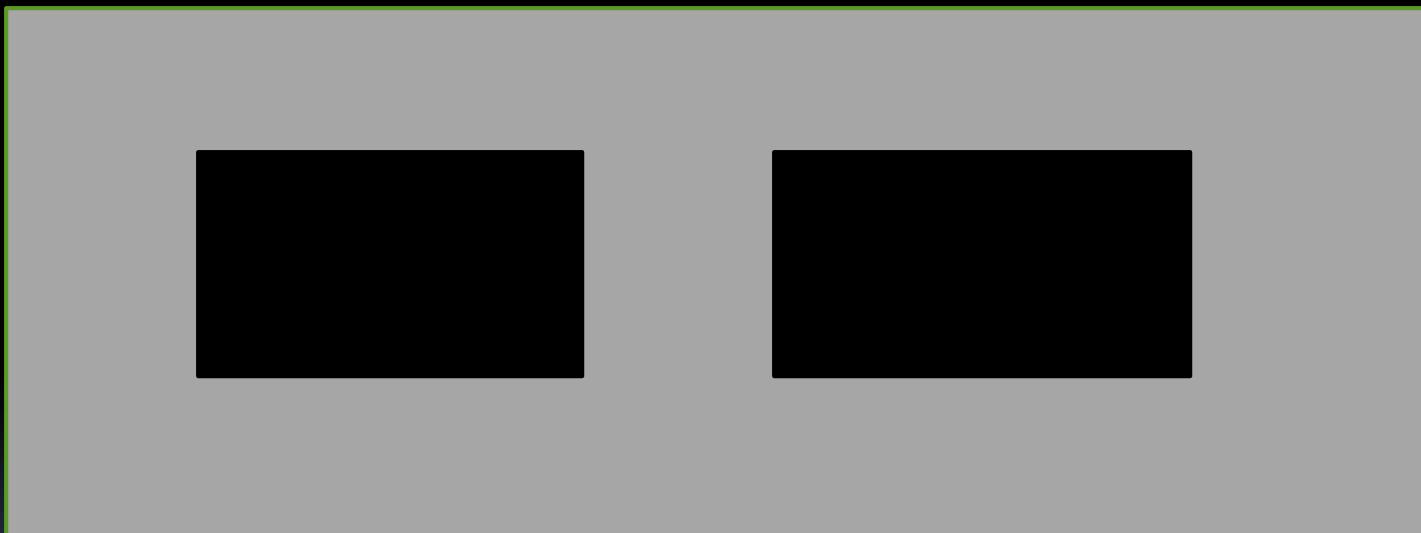
*imagerectangle(image, x1, y1, x2, y2, color);*

# Phpreactangle.php

```
<html>
<body>
<h1>These rectangles are drawn on the server</h1>
<image src="phprectangle.php">
<?php
$image_height=100; $image_width=300;
$image= imagecreate($image_width,$image_height);
$bg=imagecolorallocate($image,200,200,200);
$draw_color=imagecolorallocate($image,0,0,0);
imagerectangle($image,30,20,50,90,$draw_color);
imagerectangle($image,70,20,140,90,$draw_color);
header('Content-type:image/jpeg');
imagejpeg($image);
imagedestroy($image);
?>
</body>
</html>
```

# Drawing rectangles

These rectangles were drawn on the server



# Drawing Ellipses

- The function draws an ellipse centered at cx,cy in the image.
- The w and h values specify the ellipse's width and height respectively.
- Syntax:

*Imageellipse(image,cx,cy,w,h,color);*

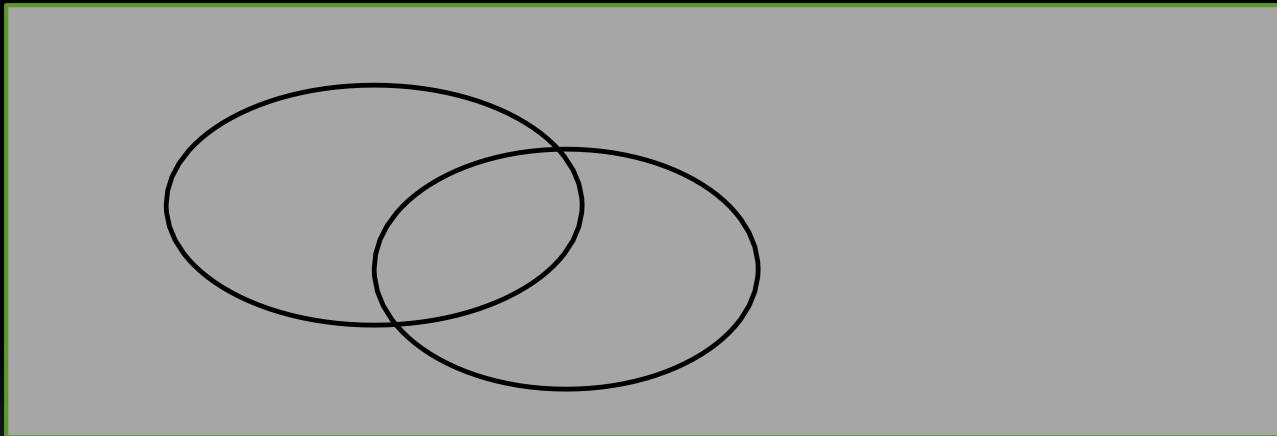
For example:

`Imageellipse($image,100,40,150,50,$draw_color);`

`Imageellipse($image,150,50,150,50,$draw_color)`

# Drawing ellipse

- These ellipses were drawn on the server:



# Working with image files

To create graphics image objects from existing image files using these functions:

- [imagecreatefromgif](#) -- Create a new image from file or URL
- [imagecreatefromjpeg](#) -- Create a new image from file or URL
- [imagecreatefrompng](#) -- Create a new image from file or URL
- [imagecreatefromwbmp](#) -- Create a new image from file or URL
- [imagecreatefromxbm](#) -- Create a new image from file or URL
- [imagecreatefromxpm](#) -- Create a new image from file or URL

Syntax:

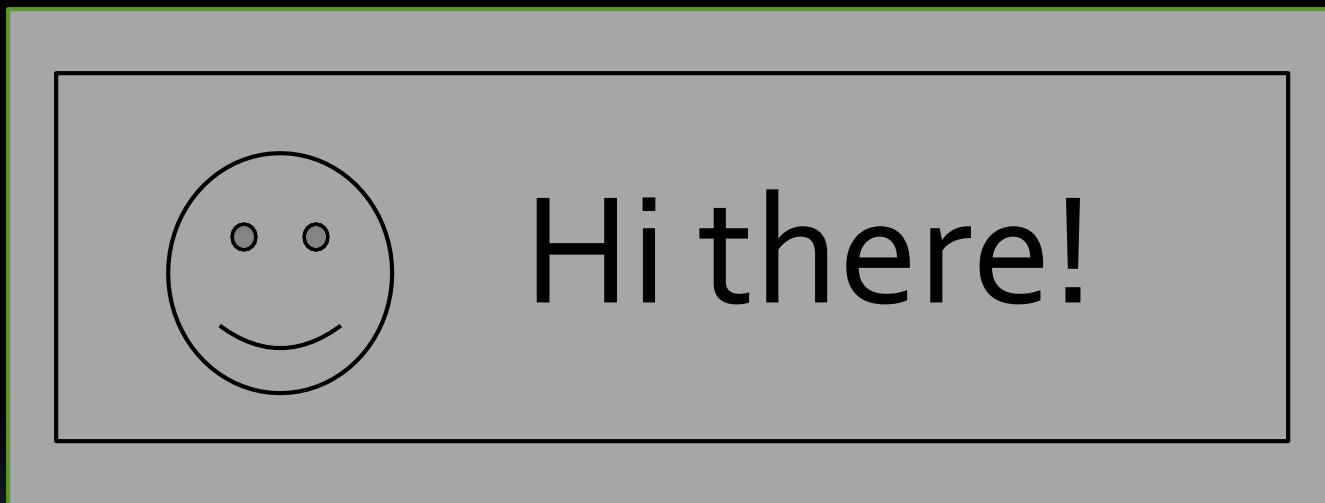
*Imagecreatefromjpeg(string filename);*

```
<html>
<body>

<?php
$image=imagecreatefromjpeg("image.jpg");
$bg=imagecolorallocate($image,200,200,200);
$draw=imagecolorallocate($image,0,0,0);
imagerectangle($image,10,10,imagesx($image)-10,imagesx($image)-10,$draw);
imagearc($image,50,50,50,50,30,150,$draw);
imagearc($image,50,50,70,70,0,360,$draw);
imagearc($image,35,45,20,20,190,-10,$draw);
imagearc($image,65,42,10,10,-10,190,$draw);
imagearc($image,65,42,10,10,-10,190,$draw);
header('Content-type:image/jpeg');
imagejpeg($image);
imagedestroy($image);
?>
</body>
</html>
```

# Using images

- This image was modified on the server:



# POSSIBLE QUESTIONS

- ❖ How to draw png image in php?
- ❖ How to draw Human face in php?
- ❖ How to create a rectangle in php?
- ❖ How to displaying images in HTML pages?
- ❖ How to destroy an image?
- ❖ What are the attributes using in header function?
- ❖ How to create ellipse in php?
- ❖ How to set line thickness?
- ❖ List out various image formats in php?

END OF SLIDE  
THANK YOU