



```
<?php
```

```
$image_path = "/var/www/html/staging/image_recognition/images/";
```

```
$source_image = 'milo1.jpg';
```

```
$compare_image = 'milo3.png';
```

```
$result = compare_imgs($image_path, $source_image, $compare_image);
```

```
function compare_imgs($path, $source_pic, $compare_pic){
```

```
    list($width, $height) = getimagesize($path.$source_pic);
```

```
    $factor = $height / $width;
```

```
    $new_width = 13;
```

```
    $new_height = $new_width * $factor;
```

```
    $source_image = imagecreatefromjpeg($path.$source_pic);
```

```
    imagecopyresampled($source_image, $source_image, 0, 0, 0, 0, $new_width,  
$new_height, $width, $height);
```

```
    $compare_image = imagecreatefromjpeg($path.$compare_pic);
```

```
    imagecopyresampled($compare_image, $compare_image, 0, 0, 0, 0, $new_width,  
$new_height, $width, $height);
```

```
    $px_x = 1;
```

```
    $px_y = 1;
```

```
$total_diff = 0;
```

```
$i=0;
```

```
while($px_y < $new_height){
```

```
    $source_rgb = imagecolorat($source_image, $px_x, $px_y);
```

```
    $source_colors = imagecolorsforindex($source_image, $source_rgb);
```

```
    $compare_rgb = imagecolorat($compare_image, $px_x, $px_y);
```

```
    $compare_colors = imagecolorsforindex($compare_image, $compare_rgb);
```

```
    $diff['x'] = $px_x;
```

```
    $diff['y'] = $px_y;
```

```
    $diff['diff'] = colordiff($source_colors['red'], $source_colors['green'], $source_colors['blue'],  
$compare_colors['red'], $compare_colors['green'], $compare_colors['blue']);
```

```
    $colordiff[$i] = $diff;
```

```
    $total_diff += $diff['diff'];
```

```
while($px_x < $new_width){
```

```
    $source_rgb = imagecolorat($source_image, $px_x, $px_y);
```

```
    $source_colors = imagecolorsforindex($source_image, $source_rgb);
```

```
    $compare_rgb = imagecolorat($compare_image, $px_x, $px_y);
```

```
    $compare_colors = imagecolorsforindex($compare_image, $compare_rgb);
```

```
    $diff['x'] = $px_x;
```

```
    $diff['y'] = $px_y;
```

```
    $diff['diff'] = colordiff($source_colors['red'], $source_colors['green'],  
$source_colors['blue'], $compare_colors['red'], $compare_colors['green'],  
$compare_colors['blue']);
```

```

        $colordiff[$i] = $diff;
        $total_diff+= $diff['diff'];

        $px_x++;
        $i++;
    }

    $px_x = 0;

    $px_y++;
    $i++;

}

return $total_diff;

}

//get the color difference

function colorDiff($r1,$g1,$b1,$r2,$g2,$b2)
{
    // do the math on each tuple
    // could use bitwise operates more efeceintly but just do strings for now.
    $red1 = hexdec($r1);
    $green1 = hexdec($g1);
    $blue1 = hexdec($b1);

    $red2 = hexdec($r2);
    $green2 = hexdec($g2);
    $blue2 = hexdec($b2);

    return abs($red1 - $red2) + abs($green1 - $green2) + abs($blue1 - $blue2) ;

}

```

?>