



Gráficos desde PHP

Google Charts

Programación Web Avanzada

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Pasos a seguir

- ▶ Incluir biblioteca JS
- ▶ Obtener datos
- ▶ Cargar datos (datatable)
- ▶ Instanciar gráfico
- ▶ Configurar gráfico
- ▶ Dibujar gráfico

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My Daily Activities

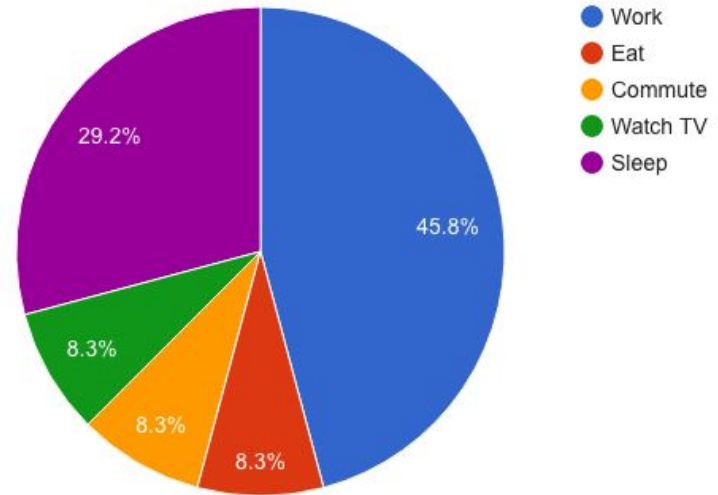


Gráfico de Torta

Google chart - pie

4

```
<html>
```

```
<head>
```

```
<script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>
```

```
<script type="text/javascript">
```

```
.
```

```
.
```

```
.
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<div id="piechart" style="width: 900px; height: 500px;"></div>
```

```
</body>
```

```
</html>
```

5

```
<script type="text/javascript">
```

```
  google.charts.load('current', {'packages':['corechart']});
```

```
  google.charts.setOnLoadCallback(drawChart);
```

```
  function drawChart() {
```

```
    var data = google.visualization.arrayToDataTable([
```

```
      ['Task', 'Hours per Day'],
```

```
      ['Work', 11],
```

```
      ['Eat', 2],
```

```
      ['Commute', 2],
```

```
      ['Watch TV', 2],
```

```
      ['Sleep', 7]
```

```
    ];
```

```
    var chart = new google.visualization.PieChart(document.getElementById('piechart'));
```

```
    chart.draw(data, options);
```

```
  }
```

```
</script>
```

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Basic Material column chart

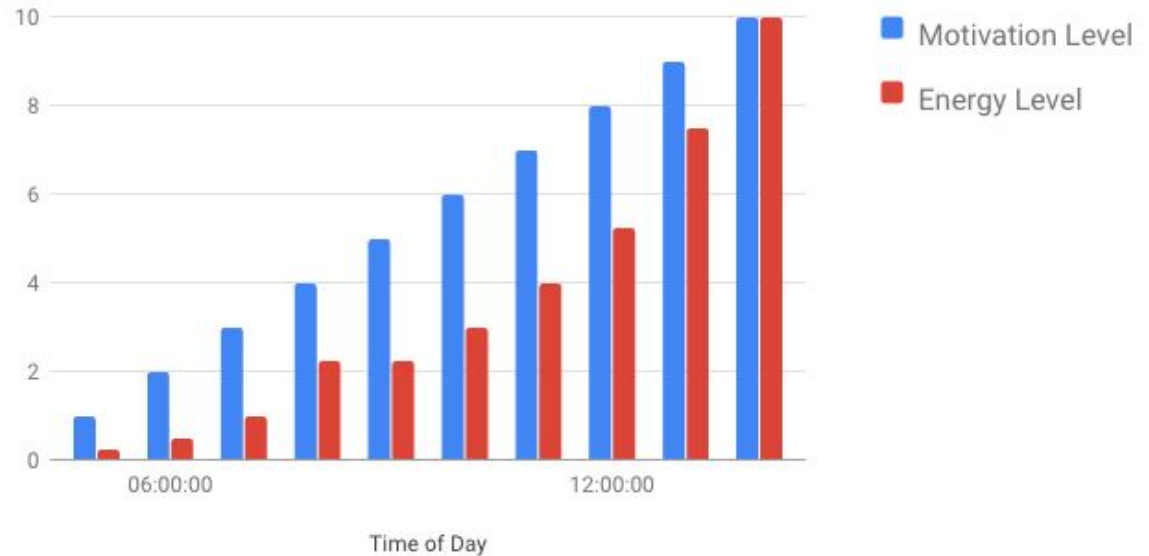


Gráfico de Barras verticales

Google chart - column

7

```
<html>
```

```
<head>
```

```
<script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>
```

```
<script type="text/javascript">
```

```
.
```

```
.
```

```
.
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<div id="columnchart" style="width: 900px; height: 500px;"></div>
```

```
</body>
```

```
</html>
```

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```
<script type="text/javascript">
```

```
  google.charts.load('current', {'packages':['corechart']});
```

```
  google.charts.setOnLoadCallback(drawChart);
```

```
  function drawChart() {
```

```
    var data = google.visualization.arrayToDataTable([
```

```
      ['Task', 'Hours per Day'],
```

```
      ['Work', 11],
```

```
      ['Eat', 2],
```

```
      ['Commute', 2],
```

```
      ['Watch TV', 2],
```

```
      ['Sleep', 7]
```

```
    ];
```

```
    var chart = new google.visualization.ColumnChart(document.getElementById('columnchart'));
```

```
    chart.draw(data, options);
```

```
  }
```

```
</script>
```


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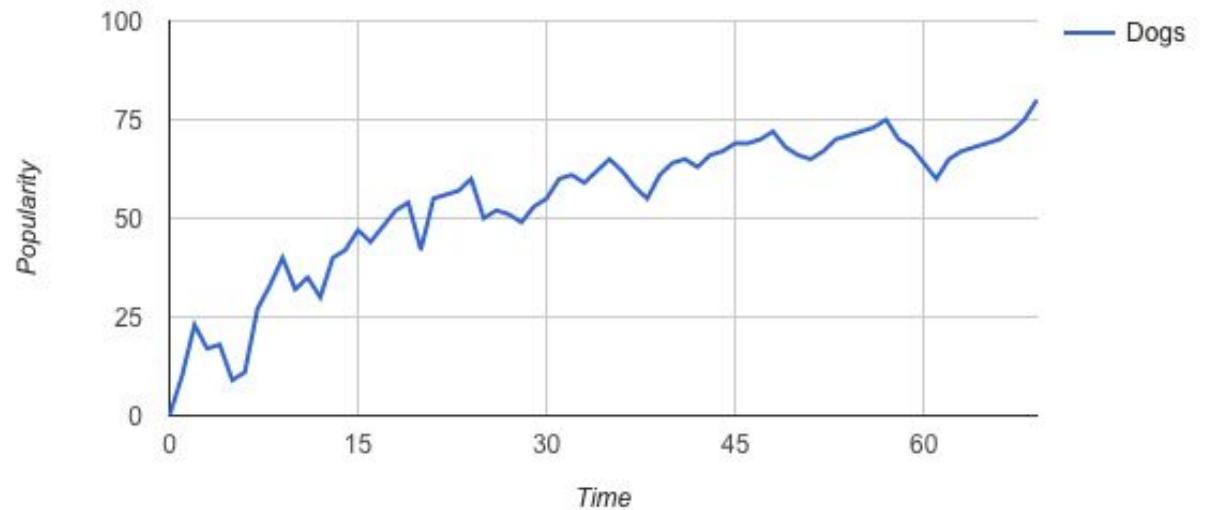


Gráfico de Línea

Google chart - line

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```
<html>
<head>
  <script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>
  <script type="text/javascript">
    .
    .
    .
  </script>
</head>
<body>
  <div id="linechart" style="width: 900px; height: 500px;"></div>
</body>
</html>
```

```
<script type="text/javascript">
```

```
  google.charts.load('current', {'packages':['corechart']});
```

```
  google.charts.setOnLoadCallback(drawChart);
```

```
  function drawChart() {
```

```
    var data = google.visualization.arrayToDataTable([
```

```
      ['Task', 'Hours per Day'],
```

```
      ['Work', 11],
```

```
      ['Eat', 2],
```

```
      ['Commute', 2],
```

```
      ['Watch TV', 2],
```

```
      ['Sleep', 7]
```

```
    ];
```

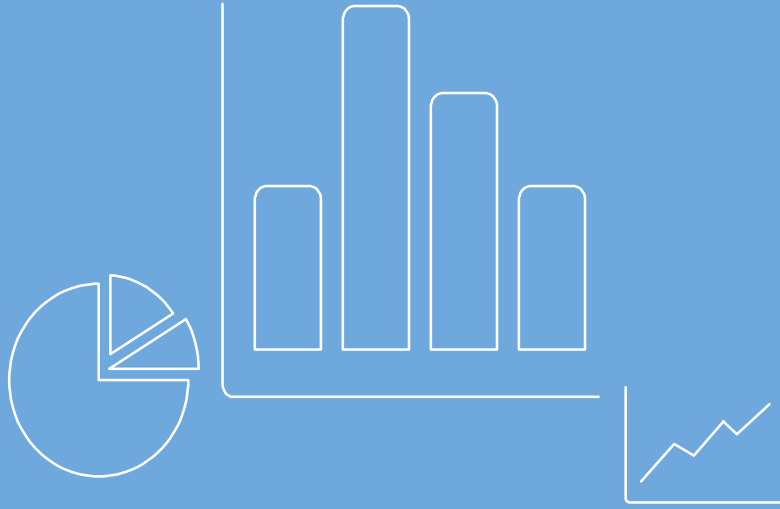
```
    var chart = new google.visualization.LineChart(document.getElementById('linehart'));
```

```
    chart.draw(data, options);
```

```
  }
```

```
</script>
```

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Gráficos a partir de Datos dinámicos

Obtener el conjunto de datos desde una consulta a la base de datos

```
<html>

<head>

  <!--Load the AJAX API-->

  <script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"
></script>

  <script type="text/javascript" src="//ajax.googleapis.com/ajax/libs/jquery/1.
10.2/jquery.min.js"></script>


</head>

<body>

  <div id="pieChart_div"></div>

  <div id="pieTable_div"></div>

</body>
</html>
```



```
$(function() {
```

```
// Load the Visualization API and the piechart package.
```

```
google.charts.load('current', {'packages':['corechart','table']});
```

```
// Set a callback to run when the Google Visualization API is loaded.
```

```
google.charts.setOnLoadCallback(loadData);
```

```
});
```

```
function loadData(){
```

```
$.ajax({
```

```
url: "getData.php",
```

```
dataType: "JSON",
```

```
success: drawChart
```

```
});
```

```
}
```

Index.php (JS parte-1)

```
function drawChart(jsonData) {  
    var pieData = new google.visualization.arrayToDataTable(jsonData);  
  
    var chart = new google.visualization.PieChart(document.  
getElementById('pieChart_div'));  
    chart.draw(pieData, {title: 'Conversión',width: 800, height: 400});  
  
    var table = new google.visualization.Table(document.getElementById  
('pieTable_div'));  
    table.draw(pieData, {showRowNumber: true, width: '60%'});  
}
```

```
<?php
```

```
//Me conecto a la base de datos
```

```
$hostname = "localhost";
```

```
$username = "root";
```

```
$password = "";
```

```
$database = "DBNAME";
```

```
$connection = mysql_connect($hostname, $username, $password);
```

```
mysql_select_db($database, $connection);
```

```
$sql = "SELECT elemento, cantidad FROM tabla WHERE ...";
```

```
$result = mysql_query($sql,$connection);
```



```
//Seteo titulos
```

```
$dataTable= array(array("Elemento","Cantidad"));
```

```
//Seteo contenido
```

```
while ($fila = mysql_fetch_assoc( $result )) {
```

```
    $dataTable[] = array($fila['elemento'],(int)$fila['cantidad']);
```

```
}
```

```
mysql_close($connection);
```

```
echo json_encode($dataTable);
```

```
?>
```

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Gráfico en PNG

`chart.getImageURI()`

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¿Cuándo lo necesito?

- ▶ Para obtener una imagen estática (si deseamos almacenarla, visualizarla en un navegador muy básico o imprimirla en un PDF)
- ▶ Hay que tener en cuenta que para que exista la URL, debe haber terminado de generarse el gráfico

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```
var chart_div = document.getElementById('chart_div');  
var chart = new google.visualization.ColumnChart(chart_div);  
  
// Esperar a que se genere el gráfico para obtener la URL del PNG  
google.visualization.events.addListener(chart, 'ready', function () {  
    chart_div.innerHTML = '';  
    console.log(chart_div.innerHTML);  
});  
  
chart.draw(data, options);
```

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Fuente

Para más información:

<https://developers.google.com/chart/>

Gracias!