

02. GOOGLE MAPS Basic.

2.1. Create a Basic Google Map

This example creates a Google Map centered in London, England:

Example:

```
<!DOCTYPE html>
<html>
<body>
<h1>My First Google Map</h1>
<div id="googleMap" style="width:100%;height:400px;"></div>

<script>
function myMap() {
var mapProp= {
    center:new google.maps.LatLng(51.508742,-0.120850),
    zoom:5,
};
var map=new
google.maps.Map(document.getElementById("googleMap"),mapProp);
}
</script>

<script src="https://maps.googleapis.com/maps/api/js?
key=YOUR_KEY&callback=myMap"></script>

</body>
</html>
```

The rest of this page describes the example above, step by step.

2.2. The Map Container and Size

The map needs an HTML element to hold the map:

Example:

```
<div id="googleMap" style="width:100%;height:400px"></div>
```

Also set the size of the map.

2.3. Create a Function to Set The Map Properties

The **mapProp** variable defines the properties for the map.

The **center** property specifies where to center the map (using latitude and longitude coordinates).

The **zoom** property specifies the zoom level for the map (try to experiment with the zoom level).

Example:

```
function myMap() {  
  var mapProp= {  
    center:new google.maps.LatLng(51.508742,-0.120850),  
    zoom:5,  
  };  
  var map=new  
  google.maps.Map(document.getElementById("googleMap"),mapProp);  
}
```

The line: **var map=new google.maps.Map(document.getElementById("googleMap"), mapProp);** creates a new map inside the <div> element with id="googleMap", using the parameters that are passed (mapProp).

2.4. Multiple Maps

The example below defines four maps with different map types:

Example:

```
var map1 = new  
google.maps.Map(document.getElementById("googleMap1"),  
mapOptions1);  
var map2 = new  
google.maps.Map(document.getElementById("googleMap2"),  
mapOptions2);  
var map3 = new  
google.maps.Map(document.getElementById("googleMap3"),  
mapOptions3);  
var map4 = new  
google.maps.Map(document.getElementById("googleMap4"),  
mapOptions4);
```

2.5. Free Google API Key

Google allows a website to call any Google API for free, thousands of times a day.

Go to <https://developers.google.com/maps/documentation/javascript/get-api-key> to learn how to get an API key.

Google Maps expects to find the API key in the key parameter when loading an API:

Example:

```
<script src="https://maps.googleapis.com/maps/api/js?  
key=YOUR_KEY&callback=myMap"></script>
```