



Wellcome to Google Maps Presentation

Map Terrain Satellite

# Outline

.History

.Functionalities

.Demo

.Workshop

# Time Line

- .2004 Acquisition: initially in C++ by Lars, Jens
- .2005: API released
- .2006: U.S., UK, CAN
- .2007: [real-time traffic](#)
- .2008: more types of maps, API supports Flash
- .2010: street view for more countries

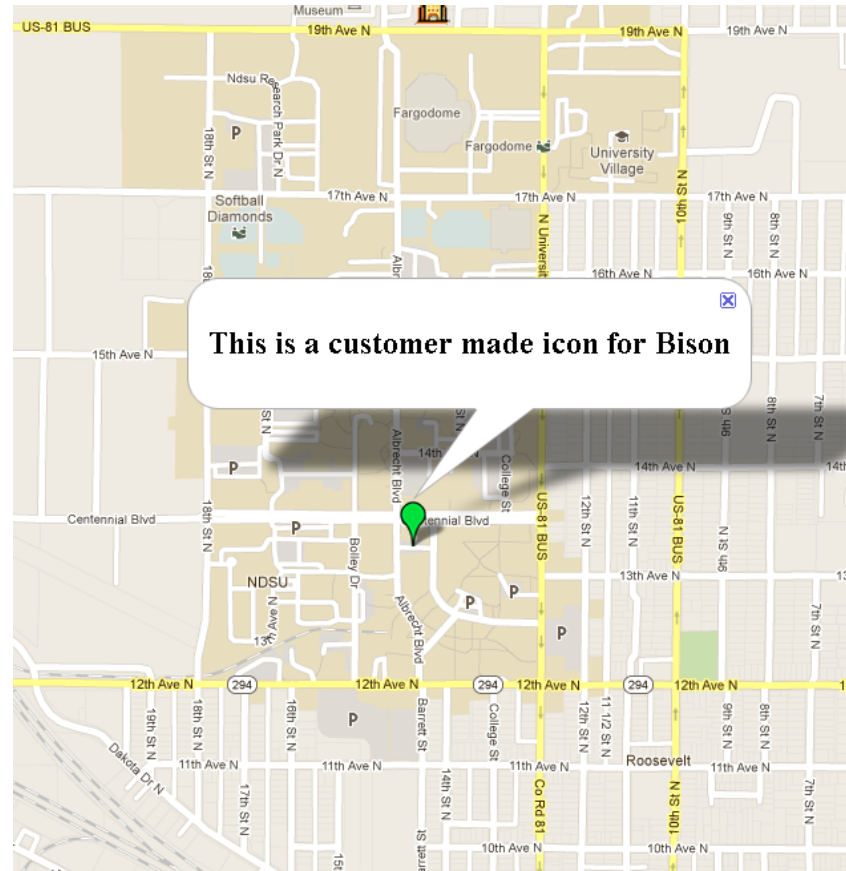
# Google API examples

[wikimapia.org](http://wikimapia.org)

[trulia.com](http://trulia.com)

[panoramio.com](http://panoramio.com)

[onnyturf.com](http://onnyturf.com)



# Start

```
var map = new GMap2(document.getElementById("map"));
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
    <title>Google Maps API Example</title>
    <link type="text/css" rel="stylesheet" href="listing_02_02.css" />
    <script type="text/javascript"
      src="http://maps.google.com/maps?file=api&v=2.193&
        key=ABQIAAAOh48Y3J93_SbAzngd63KZMurFqQ"></script>
    <script type="text/javascript" src="listing_02_06.js"></script>
  </head>
  <body onload="loadMap()" onunload="GUnload()">
    <div id="map"></div>
  </body>
</html>
```

# Map Controls

- .GScaleControl
- .GOverviewMapControl
- .GMapTypeControl
- .GLargeMapControl

```
// Add the standard map controls
map.addControl(new GScaleControl());
map.addControl(new GOverviewMapControl());
map.addControl(new GMapTypeControl());
map.addControl(new GLargeMapControl());
map.enableScrollWheelZoom();
```

- .enableScrollWheelZoom

# panTo

```
map.setCenter(new GLatLng(46.863421, -96.792317), 14);  
  window.setTimeout(function() {  
    map.panTo(new GLatLng(46.893421, -96.802317));}, 2000);
```

# addListener

```
GEvent.addListener(  
    map, "click", function(){  
        alert(map.getCenter().toString());  
        GEvent.removeListener(listener);  
    });
```



# Markers & InfoWindow

```
var coordinates = new GLatLng(46.863421, -96.792317);  
map.setCenter(coordinates, 10);  
  
var marker = new GMarker(coordinates);  
  
marker.bindInfoWindowHtml('<h4>My apartment</h4>' +  
    '<addr> 1101 7th Ave S<br />Fargo, N.D.</addr>');  
map.addOverlay(marker);  
GEvent.trigger(marker, 'click');
```

# Customer Made Marker

```
greenIcon = new GIcon(G_DEFAULT_ICON);  
greenIcon.image = 'http://sterlingudell.com/bgmm/markers/green.png';
```

*Nothing More than change the marker's image or size etc*

```
setImage('http://sterlingudell.com/bgmm/markers/yellow.png');  
showMapBlowup({mapType: G_NORMAL_MAP, zoomLevel: 14});
```

# Upload data from XML

```
GDownloadUrl("data.xml", function(data, status)
{
    var markers = GXml.parse(data).documentElement.
    getElementsByTagName("marker");
    for (var i in markers)
    {
        var m = markers[i];
        var point = new GLatLng(
        parseFloat(m.getAttribute("lat")),
        parseFloat(m.getAttribute("lng")));
        map.addOverlay(new GMarker(point));
    }
});
```

# Upload data from KML

```
geoXml = new GGeoXml('http://www.expedia.com/Fargo-Hotels.d6059376.kml',  
                    xmlLoaded);  
map.addOverlay(geoXml);
```

Search for KML?  
Google Maps

# Polylines

```
var points = [  
    new GLatLng(46.893176, -96.801126),  
    new GLatLng(46.894576, -96.801786),  
    new GLatLng(46.895876, -96.802286),  
    new GLatLng(46.894576, -96.807566)  
];
```

```
map.addOverlay(new GPolyline(points));
```

# Links

Tutorials

<http://econym.org.uk/gmap/>

Google Maps API 2

<http://code.google.com/apis/maps/documentation/javascript/v2/examples/>

Google Maps API Family

<http://code.google.com/apis/maps/index.html>

# Exercise

The website doesn't provide specific coordinates, so here I provided some coordinates and files. You can just have everything inside one javascript file, and you can find examples in the presentation too.

<http://econym.org.uk/gmap/>

- The Basics Part 1, use the coordinate: 46.863421, -96.792317
- The Basics Part 3, use the data.xml file provided
- The Basics Part 19, use this kml file:

<http://www.expedia.com/Fargo-Hotels.d6059376.kml>

- Add a polyline to the map, here are the coordinates:  
(46.893176, -96.801126),(46.894576, -96.801786),  
(46.895876, -96.802286),(46.894576, -96.807566)