

schiller labs . gis day 2006

tutorial two :: census data [the polygon]

template

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">

<head>

    <meta http-equiv="Content-Type" content="text/html; charset=iso-
8859-1" />
    <title></title>

</head>

<body>

</body>

</html>
```

step 00

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" xmlns:v="urn:schemas-
microsoft-com:vml">

<head>

    <meta http-equiv="Content-Type" content="text/html; charset=iso-
8859-1" />
    <title></title>

    <style type="text/css" media="all">
        <!--
        v\:* {
            behavior:url(#default#VML);
        }
        -->
    </style>

    <script type="text/javascript" language="javascript"
src="http://maps.google.com/maps?file=api&v=2&key=ABQIAAAAY4fplJ67BZi1A
R7Ilefq2RTf-p6f-jBiOKWFQzzWSYwKG0Mn1BRGGs164PZM7UTwBaDtnmm7i60z-
g"></script>
    <script type="text/javascript" language="javascript"
src="http://schillerlabs.net/gisday2006/javascript/gpolygon.gen.js"></s
cript>
```

```

<script type="text/javascript" language="javascript">
  <!-- begin hiding script from older browsers

  // global variables
  var objMap, arrPolygonData, arrPolygons;
  arrPolygons = new Array();

  function wmLoad() {
    // test for browser compatibility
    if (GBrowserIsCompatible()) {
      // initialize map and form
      objMap = new
GMap2(document.getElementById("map"));
      // add map controls
      objMap.addControl(new GMapTypeControl());
      objMap.addControl(new GLargeMapControl());
      objMap.addControl (new GScaleControl());
      // display map
      objMap.setCenter(new GLatLng(43.065837, -
87.901191), 13);
    } else {
      // browser doesn't support google maps
      alert("We're sorry, but your browser doesn't
support Google Maps. Please upgrade to a compatible browser.");
      if (document.getElementById) {
        objMap = document.getElementById("map");
        objMap.innerHTML = '<p><b>&rarr; <a
href="http://local.google.com/support/bin/answer.py?answer=16532&topic=
1499" target="_blank">upgrade your browser</a></b></p>';
      }
    }
  }

  // end hiding script from older browsers -->
</script>

```

```
</head>
```

```
<body onload="javascript:wmLoad();" onunload="javascript:GUnload();">
```

```
<div id="map" style="height:300px;width:500px;"></div>
```

```
</body>
```

```
</html>
```

step 02

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml" xmlns:v="urn:schemas-
microsoft-com:vml">
```

```
<head>
```

```

<meta http-equiv="Content-Type" content="text/html; charset=iso-
8859-1" />
<title></title>

<style type="text/css" media="all">
  <!--
  v\:* {
    behavior:url(#default#VML);
  }
  -->
</style>

<script type="text/javascript" language="javascript"
src="http://maps.google.com/maps?file=api&v=2&key=ABQIAAAAY4fplJ67BZi1A
R7Ilefq2RTf-p6f-jBiOKWFQzzWSYwKG0Mn1BRGGs164PZM7UTwBaDtnmm7i60z-
g"></script>
<script type="text/javascript" language="javascript"
src="http://schillerlabs.net/gisday2006/javascript/gpolygon.gen.js"></s
cript>

<script type="text/javascript" language="javascript">
  <!-- begin hiding script from older browsers

  // global variables
  var objMap, arrPolygonData, arrPolygons;
  arrPolygons = new Array();

  function wmDrawPolygons() {
    // retrieve and display existing data
    var arrPoints = new Array();
    GDownloadUrl("xml/tutorialtwo.xml", function(data,
responseCode) {
      var objXml = GXml.parse(data);
      arrPolygonData =
objXml.documentElement.getElementsByTagName("tract");
      for (var i = 0; i < arrPolygonData.length; i++)
      {
        // determine coords
        var strTemp =
arrPolygonData[i].getAttribute("coords");
        var arrTemp = strTemp.split("|");
        for (var j = 0; j < arrTemp.length; j++)
        {
          var arrTemp2 =
arrTemp[j].split(",");
          arrPoints[j] = new
GLatLng(parseFloat(arrTemp2[0]), parseFloat(arrTemp2[1]));
        }
        arrPolygons[i] = new GPolygon(arrPoints,
true, "#0000FF", 0.40, true);
        // draw polygon
        objMap.addOverlay(arrPolygons[i]);
      }
    });
  }
}

```

```

function wmLoad() {
    // test for browser compatibility
    if (GBrowserIsCompatible()) {
        // initialize map and form
        objMap = new
GMap2 (document.getElementById("map"));
        // add map controls
        objMap.addControl(new GMapTypeControl());
        objMap.addControl(new GLargeMapControl());
        objMap.addControl (new GScaleControl());
        // display map
        objMap.setCenter(new GLatLng(43.065837, -
87.901191), 13);

        // add polygons
        wmDrawPolygons ();
    } else {
        // browser doesn't support google maps
        alert("We're sorry, but your browser doesn't
support Google Maps. Please upgrade to a compatible browser.");
        if (document.getElementById) {
            objMap = document.getElementById("map");
            objMap.innerHTML = '<p><b>&rarr; <a
href="http://local.google.com/support/bin/answer.py?answer=16532&topic=
1499" target="_blank">upgrade your browser</a></b></p>';
        }
    }

    // end hiding script from older browsers -->
</script>

</head>

<body onload="javascript:wmLoad();" onunload="javascript:GUnload();">

    <div id="map" style="height:300px;width:500px;"></div>

</body>

</html>

```

step 03

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" xmlns:v="urn:schemas-
microsoft-com:vml">

<head>

    <meta http-equiv="Content-Type" content="text/html; charset=iso-
8859-1" />
    <title></title>

    <style type="text/css" media="all">

```

```

        <!--
        v\:* {
            behavior:url(#default#VML);
        }
        -->
    </style>

    <script type="text/javascript" language="javascript"
src="http://maps.google.com/maps?file=api&v=2&key=ABQIAAAAY4fplJ67Bzi1A
R7Ilefq2RTf-p6f-jBiOKWFQzzWSYwKG0Mn1BRGGs164PZM7UTwBaDtnmm7i60z-
g"></script>
    <script type="text/javascript" language="javascript"
src="http://schillerlabs.net/gisday2006/javascript/gpolygon.gen.js"></s
cript>

    <script type="text/javascript" language="javascript">
        <!-- begin hiding script from older browsers

        // global variables
        var objMap, arrPolygonData, arrPolygons;
        arrPolygons = new Array();
        var arrRamp = new Array(2);
        arrRamp[0] = "#FF9900";
        arrRamp[1] = "#FF0000";
        var arrValues = new Array(2);
        arrValues[0] = 3000;
        arrValues[1] = 5000;

        function wmDrawPolygons() {
            // retrieve and display existing data
            var arrPoints = new Array();
            GDownloadUrl("xml/tutorialtwo.xml", function(data,
responseCode) {
                var objXml = GXml.parse(data);
                arrPolygonData =
objXml.documentElement.getElementsByTagName("tract");
                for (var i = 0; i < arrPolygonData.length; i++)
                {
                    // determine coords
                    var strTemp =
arrPolygonData[i].getAttribute("coords");
                    var arrTemp = strTemp.split("|");
                    for (var j = 0; j < arrTemp.length; j++)
                    {
                        var arrTemp2 =
arrTemp[j].split(",");
                        arrPoints[j] = new
GLatLng(parseFloat(arrTemp2[0]), parseFloat(arrTemp2[1]));
                    }
                    // determine color based on pop
                    var intPop =
arrPolygonData[i].getAttribute("pop");
                    for (var j = 0; j < arrValues.length;
j++) {
                        if (intPop < arrValues[j]) {
                            arrPolygons[i] = new
GPolygon(arrPoints, true, arrRamp[j], 0.40, true);

```

```

                break;
            }
        }
        // draw polygon
        objMap.addOverlay(arrPolygons[i]);
    }
});
}

function wmLoad() {
    // test for browser compatibility
    if (GBrowserIsCompatible()) {
        // initialize map and form
        objMap = new
GMap2(document.getElementById("map"));
        // add map controls
        objMap.addControl(new GMapTypeControl());
        objMap.addControl(new GLargeMapControl());
        objMap.addControl (new GScaleControl());
        // display map
        objMap.setCenter(new GLatLng(43.065837, -
87.901191), 13);
        // add polygons
        wmDrawPolygons();
    } else {
        // browser doesn't support google maps
        alert("We're sorry, but your browser doesn't
support Google Maps. Please upgrade to a compatible browser.");
        if (document.getElementById) {
            objMap = document.getElementById("map");
            objMap.innerHTML = '<p><b>&rarr; <a
href="http://local.google.com/support/bin/answer.py?answer=16532&topic=
1499" target="_blank">upgrade your browser</a></b></p>';
        }
    }
}

// end hiding script from older browsers -->
</script>

```

```
</head>
```

```
<body onload="javascript:wmLoad();" onunload="javascript:GUnload();">
```

```
<div id="map" style="height:300px;width:500px;"></div>
```

```
</body>
```

```
</html>
```

step 04

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```



```

        for (var j = 0; j < arrTemp.length; j++)
    {
        var arrTemp2 =
arrTemp[j].split(",");
        arrPoints[j] = new
GLatLng(parseFloat(arrTemp2[0]), parseFloat(arrTemp2[1]));
    }
    // determine color based on pop
    var intPop =
arrPolygonData[i].getAttribute("pop");
    for (var j = 0; j < arrValues.length;
j++) {
        if (intPop < arrValues[j]) {
            arrPolygons[i] = new
GPolygon(arrPoints, true, arrRamp[j], 0.40, true);
            break;
        }
    }
    // draw polygon
    objMap.addOverlay(arrPolygons[i]);
}
cnvTempPoly(arrPolygonData, arrPolygons);
});
}

function wmLoad() {
    // test for browser compatibility
    if (GBrowserIsCompatible()) {
        // initialize map and form
        objMap = new
GMap2(document.getElementById("map"));
        // add map controls
        objMap.addControl(new GMapTypeControl());
        objMap.addControl(new GLargeMapControl());
        objMap.addControl (new GScaleControl());
        // display map
        objMap.setCenter(new GLatLng(43.065837, -
87.901191), 13);

        // add polygons
        wmDrawPolygons();
        // add click event listener
        GEvent.addListener(objMap,
"click",
function(objMarker, objPoint) {
            if (objPoint) {
                for (var i = 0; i <
arrPolygons.length; i++) {
                    if
(arrPolygons[i].inZone(objPoint)) {
                        alert("Census Tract: " +
arrPolygonData[i].getAttribute("id") +
"\n\r" + "Population: " +
arrPolygonData[i].getAttribute("pop"));
                    }
                }
            }
        });
    } else {
        // browser doesn't support google maps

```

```
        alert("We're sorry, but your browser doesn't
support Google Maps. Please upgrade to a compatible browser.");
        if (document.getElementById) {
            objMap = document.getElementById("map");
            objMap.innerHTML = '<p><b>&rarr; <a
href="http://local.google.com/support/bin/answer.py?answer=16532&topic=
1499" target="_blank">upgrade your browser</a></b></p>';
        }
    }

    // end hiding script from older browsers -->
</script>

</head>

<body onload="javascript:wmLoad();" onunload="javascript:GUnload();">

    <div id="map" style="height:300px;width:500px;"></div>

</body>

</html>
```