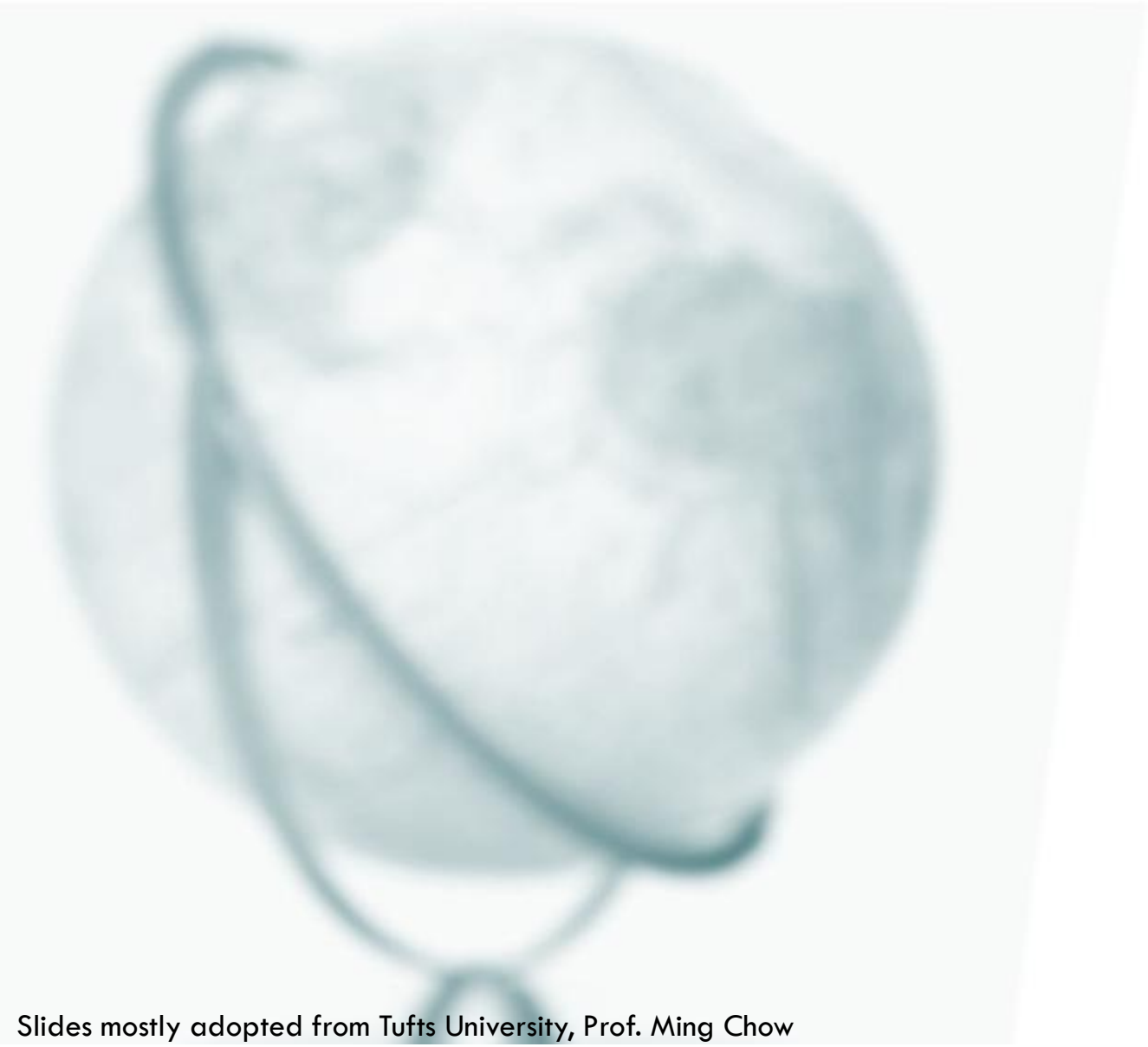

Universiteti i Prishtinës

API-S

Slides mostly adopted from Tufts University, Prof. Ming Chow

Dr. Ing. Lule Ahmedi
Lënda: Programimi në Internet

Google Maps API

- RTFM: http://code.google.com/apis/maps/documentation/javascript/
- We will now use version 3 of Google Maps API. Version 2 is now deprecated.
  - Version 3 uses HTML5.
  - You no longer have to register for an API key to use the Google Maps API.
  - You can now write a page that uses Google Maps and run it from your desktop (with Internet connection); no web server required.

Google Maps API Requirements

- In the <head>, the JavaScript source http://maps.google.com/maps/api/js?sensor=set_to_true_or_false

  (in our case, we will use true for the most part because we will write applications that use a sensor to determine the user's location)

  - That is, put `<script type="text/javascript" src="http://maps.google.com/maps/api/js?sensor=true"></script>` in the `<head>`
- # CSS:

```
html { height: 100% }
body { height: 100%; margin: 0px; padding: 0px }
#map_canvas { height: 100% }
```

Tutorial and the Complete Reference

- http://code.google.com/apis/maps/documentation/javascript/tutorial.html
- http://code.google.com/apis/maps/documentation/javascript/reference.html

Google Maps Objects

- google.maps.Map - The map object (duh!)
- google.maps.LatLng - An object that contains the latitude and longitude pair
- google.maps.Marker - A marker
- google.maps.InfoWindow - An info window
- google.maps.Polyline - A linear overlay
- google.maps.event - An event listener for Google Maps

Structure of a Google Maps API (version 3) Page

```
<!DOCTYPE html>
<html><head><meta name="viewport" content="initial-scale=1.0, user-scalable=no" />

<!-- Better put the following style into a separate CSS file -->
<style type="text/css">
  html { height: 100% }
  body { height: 100%; margin: 0px; padding: 0px }
  #map_canvas { height: 100% }
</style>
<script type="text/javascript" src="http://maps.google.com/maps/api/js?sensor=true"></script>
<script type="text/javascript">
    function initialize()           {
            var latlng = new google.maps.LatLng(...);
            // "..." is stuff you have to fill in
            ...
            var myOptions = {...};
            var map = new google.maps.Map(document.getElementById("map_canvas"), myOptions);    }
</script>
</head>
<body onload="initialize()">
    <div id="map_canvas" style="width:100%; height:100%"></div>
</body></html>
```

Google Maps API: Example

```
<!DOCTYPE html><html><head>
<meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=no" />
<meta http-equiv="content-type" content="text/html; charset=UTF-8"/>
<link href="http://code.google.com/apis/maps/documentation/javascript/examples/default.css"
    rel="stylesheet" type="text/css" />
<title>Google Maps JavaScript API v3 Example: Map Simple</title>
<script type="text/javascript" src="http://maps.google.com/maps/api/js?sensor=false"></script>
<script type="text/javascript">
    function initialize() {
          var myLatlng = new google.maps.LatLng(42.648, 21.1665);
          var myOptions = {
                    zoom: 15,
                    center: myLatlng,
                    mapTypeId: google.maps.MapTypeId.ROADMAP
          }
          var map = new google.maps.Map(document.getElementById("map_canvas"), myOptions);

          var marker = new google.maps.Marker({
                    position: myLatlng,
                    map: map,
                    title:"Miresevini!"
          });
    }
</script></head>
<body onload="initialize()">
    <div id="map_canvas"></div>
</body>
</html>
```

Google Maps API: Example Result