

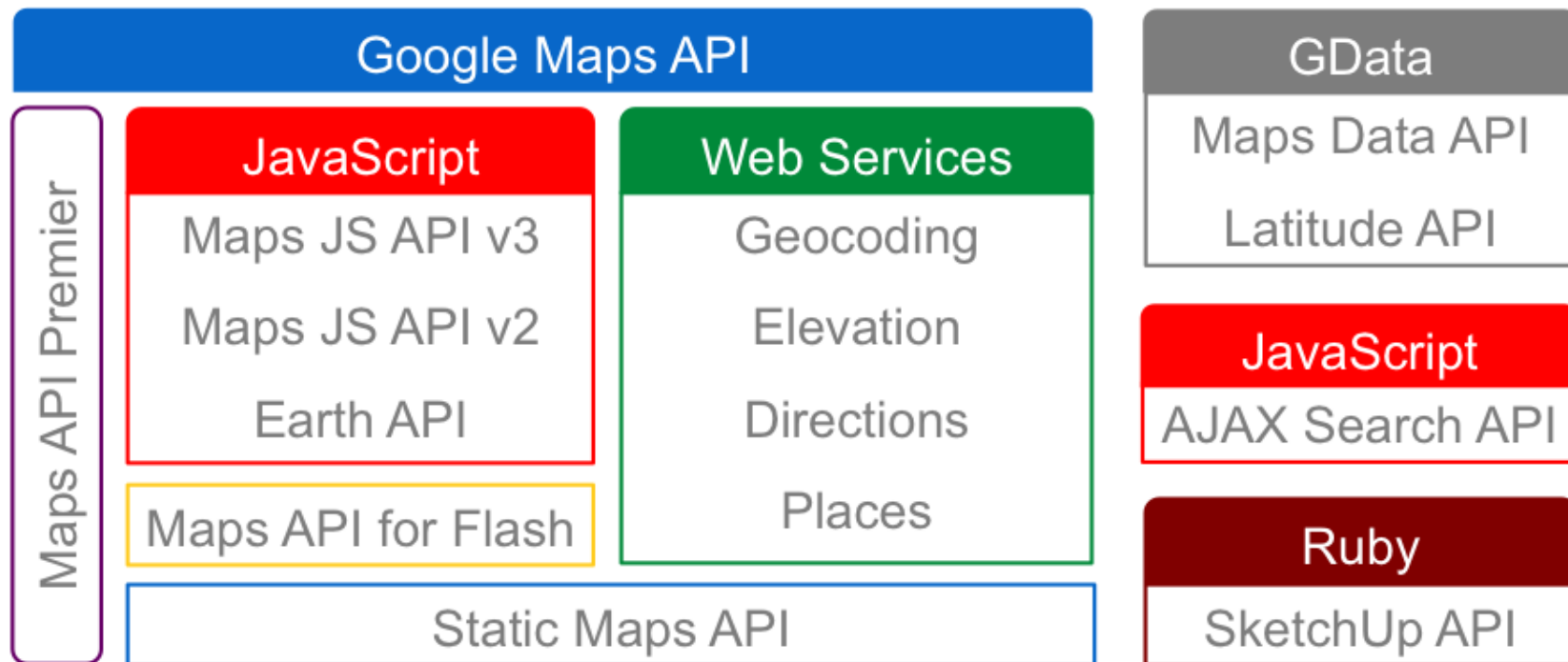
Google™

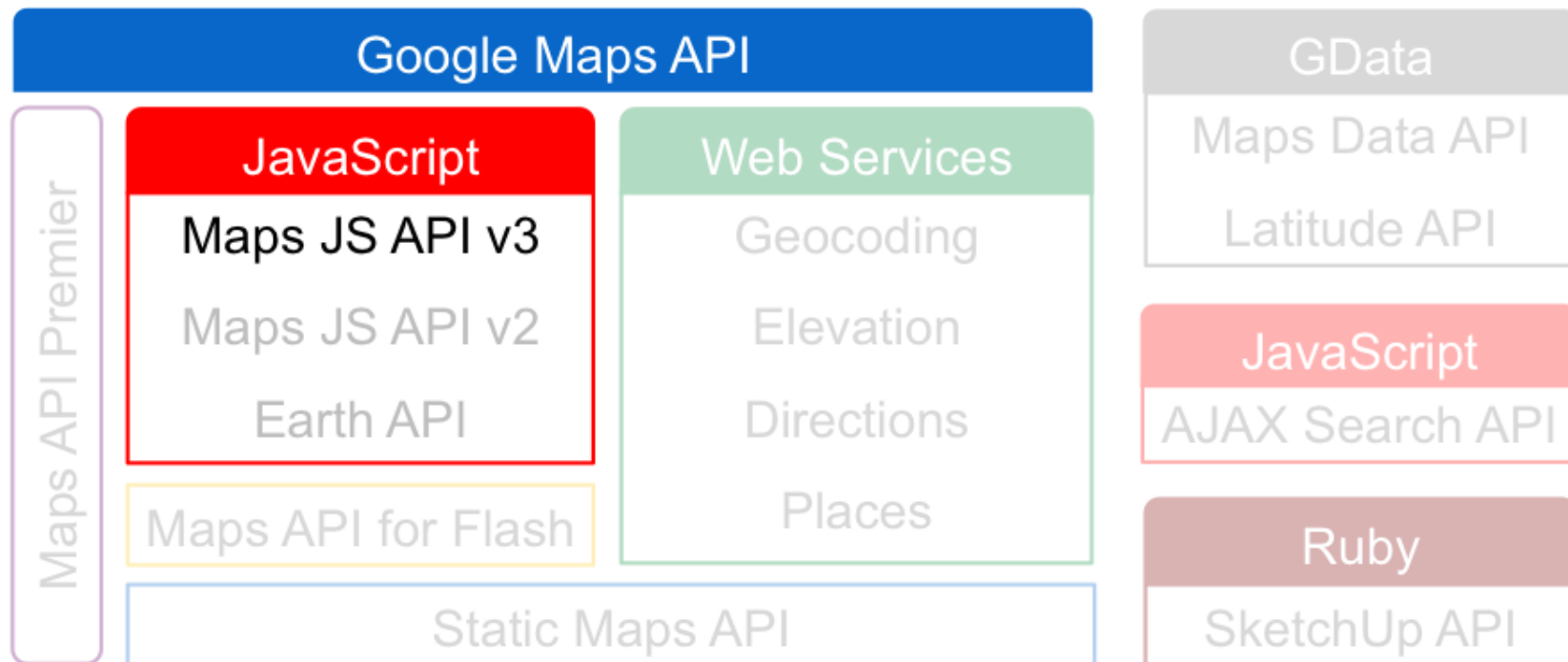


# Moving Beyond Markers: Advanced Maps API Customisation

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<http://bit.ly/iogeo7>





# Overview

- Basic Customisation
  - Custom Markers
  - Custom Directions
  - Custom Controls
- **New!** Advanced Street View Customisation
  - Custom imagery
  - Connecting to existing imagery
- **Something New!**
  - Take map customisation to a whole new level



Basic  
Customisation

# Custom Markers

<http://beyond-markers.appspot.com/custom-markers>



# Custom Markers – Simple Icon

```
var marker = new google.maps.Marker({  
  position: myLatLng,  
  map: map,  
  title: 'Lorem Ipsum',  
  icon: 'http://my.domain/my.file.png'  
});
```

# Custom Markers – Advanced Icon

```
var myImage = new google.maps.MarkerImage(  
    'http://my.domain/my.file.png',  
    // Size.  
    new google.maps.Size(20, 32),  
    // Origin.  
    new google.maps.Point(0, 0),  
    // Anchor.  
    new google.maps.Point(5, 32),  
    // Scaled size.  
    new google.maps.Size(10, 16)  
);
```

# Custom Markers – Marker Shapes and Shadows

```
var myImage = ...;
var myShadow = ...;
var myShape =
  {
    coord: [1, 1, 1, 20, ...],
    type: 'poly'
  };
var marker = new google.maps.Marker({
  ...,
  icon: myImage,
  shadow: myShadow,
  shape: myShape
});
```

# Custom Directions

<http://beyond-markers.appspot.com/custom-directions>

# Customising Directions

```
function doRender(response, status) {  
  var route = response.routes[0];  
  var leg = route.legs[0];  
  var steps = leg.steps;  
  for (var i = 0; i < steps.length; ++i) {  
    var info = steps[i].instructions;  
    createListElem(info);  
  }  
}  
  
directionsService.route(request, doRender);
```

# Custom Controls

<http://beyond-markers.appspot.com/custom-controls>

# Custom Controls

```
var myControl =  
  document.createElement('div');  
  
myControl.style.padding = '10px';  
...  
  
google.maps.event.addDomListener(  
  myControl,  
  'click',  
  function() {  
    map.doSomethingCool();  
  });
```

# Custom Controls

```
map.controls[  
  google.maps.ControlPosition.TOP  
].push(myControl);
```





# Custom KML Handling

<http://beyond-markers.appspot.com/custom-kml>

# Custom info window using KML

```
// Load the KML, suppress automatic IWs.  
var kmlLayer = new KmlLayer(  
  'http://my.domain/my.own.kml',  
  {  
    map: myMap,  
    suppressInfoWindows: true  
  });
```

# Custom info window using KML

```
// Intercept and handle clicks.  
google.maps.event.addListener(  
  kmlLayer, 'click', function(e) {  
    var desc = e.featureData.description;  
    displayDescription(desc);  
  });
```

So, your site's  
pretty sweet...

# Custom Street View in V3

<http://beyond-markers.appspot.com/custom-sv-pano>

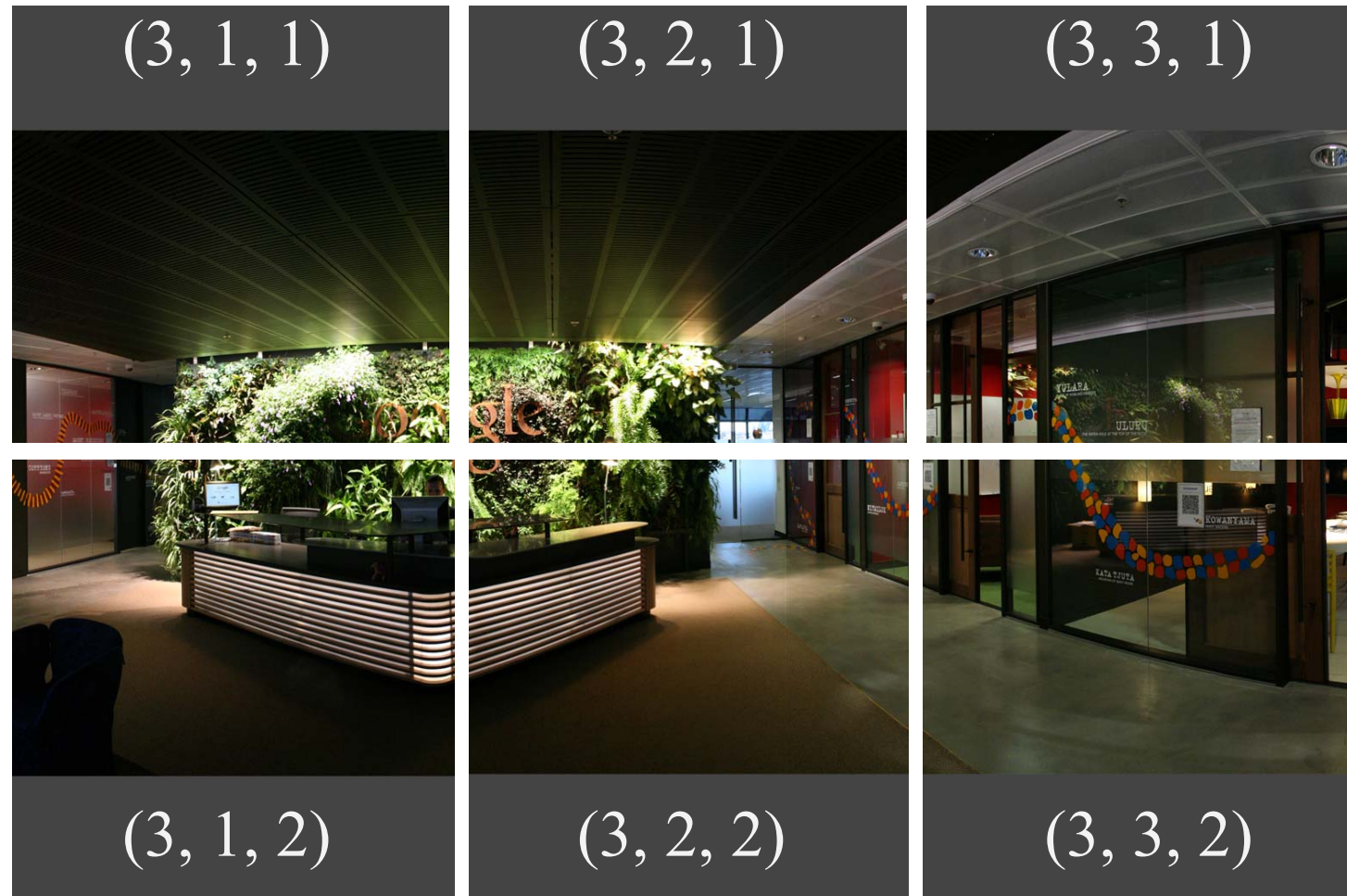
# Street View in v3 - Adding streetview

```
map.set('streetViewControl', true);  
  
var panorama = map.getStreetView();
```

# Street View in v3 - Custom Markers

```
var markerStreetView =  
  new google.maps.Marker(  
    { position: latlng,  
      map: panorama,  
      shadow: panoMarkerShadow,  
      icon: panoMarkerImage,  
      draggable: true,  
      title: 'Google Sydney'  
    }  
  );
```

# Street View in v3 - Custom Panoramas



(zoom, x, y)



# Street View in v3 - Custom Panoramas

```
var rooms = {  
  blue_room: {  
    name: 'Blue Room',  
    originHeading: 130,  
    links: [ {  
      heading: 94,  
      description: 'Reception',  
      pano: 'reception' },  
      ...  
    ]  
  },  
  ...  
};
```

# Street View in v3 - Custom Panoramas

```
panorama.setPanoProvider(  
function(pano) {  
  var room = rooms[pano];  
  return {  
    location: { pano: pano },  
    links: { room.links },  
    tiles: {  
      tileSize: new google.maps.Size(512, 512),  
      worldSize: new google.maps.Size(8192, 4096),  
      originHeading: room.originHeading,  
      getTileUrl: function(pano, z, x, y) {  
        return 'http://my_server/tiles/tile_' +  
          z + '_' + x + '_' + y + '.jpg';  
      }  
    }  
  }  
});
```

# Street View in v3 - Linking to existing SV

```
google.maps.event.addListener(panorama,  
    'links_changed',  
    function() {  
var pano = panorama.getPano();  
var links = panorama.get('links');  
if (pano == 'IUFpPojXdqX79HJQbKASTg') {  
    // Add a link to reception.  
    links.push({  
        heading: 55,  
        description : 'Google Sydney',  
        pano : 'reception'  
    });  
}  
});
```

# A Touch of Style

<http://beyond-markers.appspot.com/a-touch-of-style>

# Map Styling - Defining Styles

```
var myStyle = [{  
  featureType: 'all',  
  elementType: 'all',  
  stylers: [{saturation: -50}]  
}]
```

# Map Styling - Defining Styles

```
var myStyle = [{  
  featureType: 'all',  
  elementType: 'all',  
  stylers: [{saturation: -50}]  
}, {  
  featureType: 'road.local',  
  elementType: 'all',  
  stylers: [{visibility: 'off'}]  
}]
```

# Map Styling - Defining Styles

```
var myStyle = [{  
  featureType: 'all',  
  elementType: 'all',  
  stylers: [{saturation: -50}]  
}, {  
  featureType: 'road.local',  
  elementType: 'all',  
  stylers: [{visibility: 'off'}]  
}, {  
  featureType: 'poi.park',  
  elementType: 'geometry',  
  stylers: [{hue: '#08a600'},  
            {lightness: -50}]  
}];
```

# Map Styling - Stylers

Normal

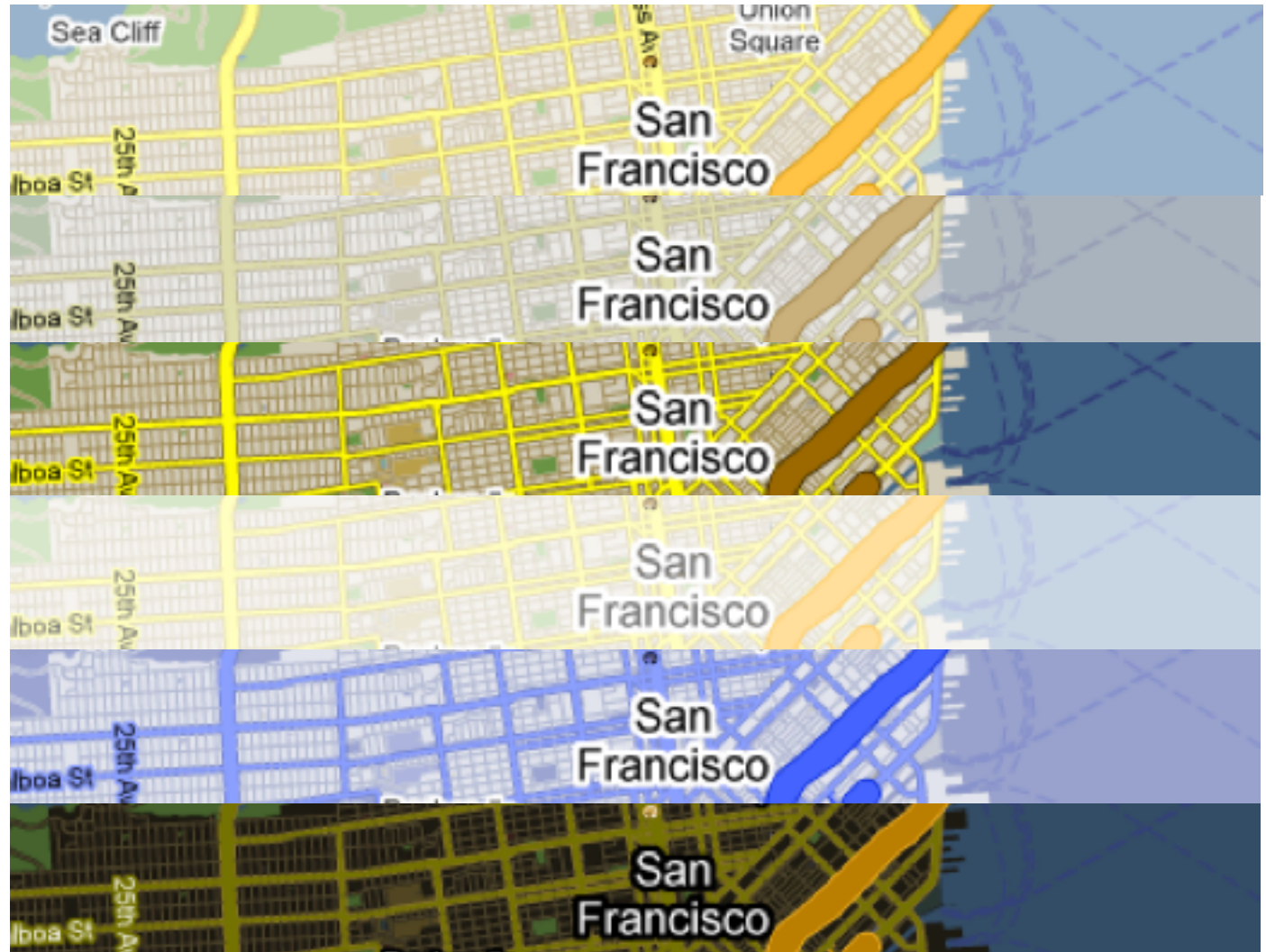
saturation

gamma

lightness

hue

invert\_lightness





# Map Styling - Activating a style

```
var mapType = new  
    google.maps.StyledMapType(myStyle);  
  
mapType.name = 'Styled';  
map.mapTypes.set('custom', mapType);  
map.setMapTypeId('custom');
```

# Styled Maps:

## Make your maps your own

# Google Developer Qualification

**Get Qualified.**  
<http://code.google.com/qualify>



Chrome Extensions



Gadgets



Search



Android



JS Maps API



KML



3D

All code from today's talk available at  
<http://beyond-markers.appspot.com/>

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