

HILL TRACKR

A hands-free hill plotting driving app

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Demo

React

Google Maps Api

MySQL+Apache

Data Flow

React implements one-way reactive data flow which reduces boilerplate and is easier to reason about than traditional data binding.

Geolocation

Google maps Api allow for plotting and position tracking.

Storing

MySQL and Apache allow use of a database to store the markers. The markers are stored by their latitude and longitude and are parsed through xml.

Check for support for DeviceOrientation event

```
if(window.DeviceOrientationEvent) {
    window.addEventListener('deviceorientation', function(event) {

        var alpha = event.alpha;
        var beta = (event.beta + 0).toFixed(1);
        var gamma = (event.gamma + 90).toFixed(1);

        // beta.toFixed(1); // 2.40

        if(alpha!=null || beta!=null || gamma!=null) {

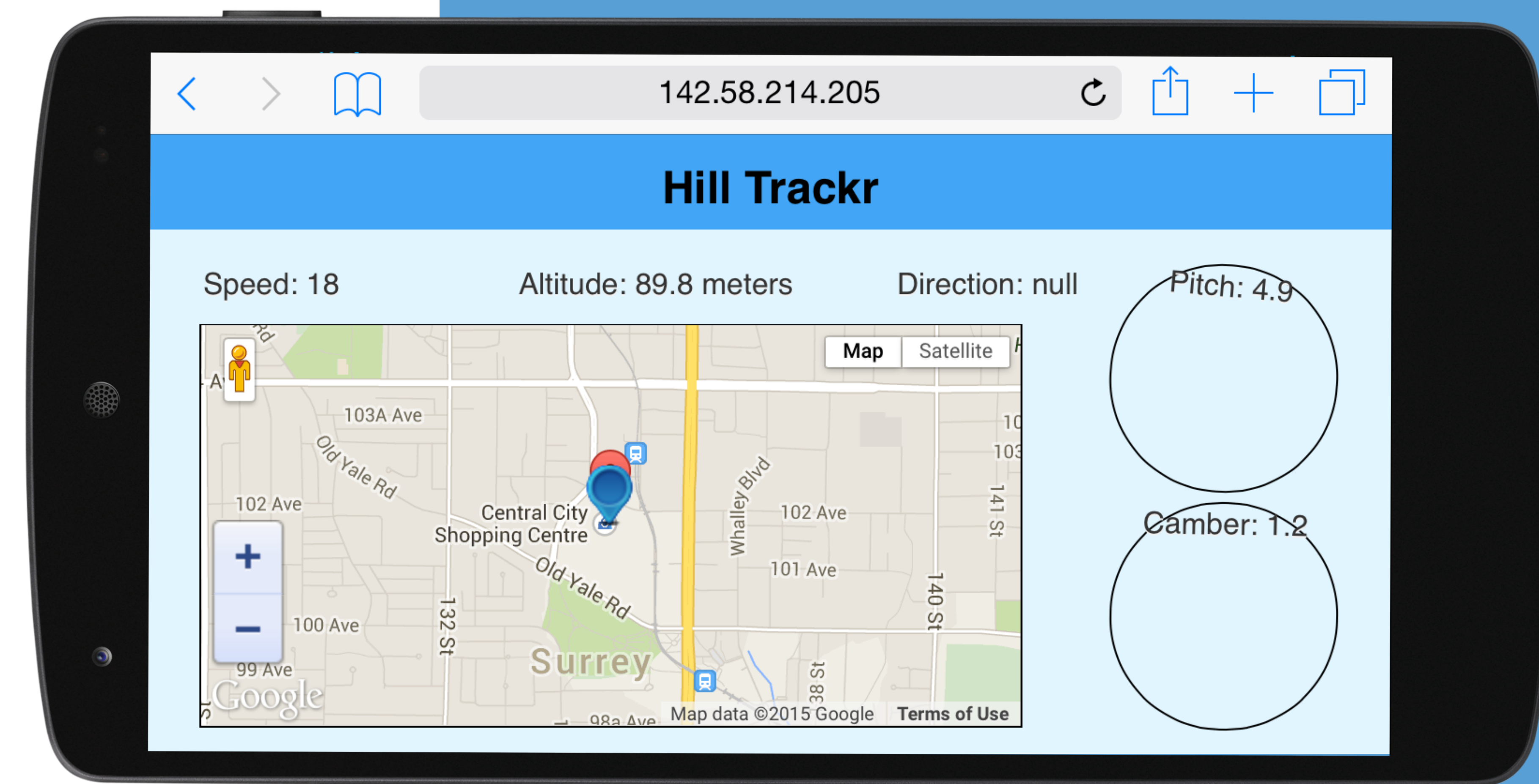
            dataGamma.innerHTML = 'Pitch: ' + gamma;
            dataBeta.innerHTML = 'Camber: ' + beta;
            // direction.innerHTML = 'Direction: ' + alpha;

        }
    });
}
```

Load Markers

```
$.get("map_process.php", function (data) {
    $(data).find("marker").each(function () {
        var name    = $(this).attr('name');
        var address  = '<p>'+ $(this).attr('address') +'</p>';
        var type     = $(this).attr('type');
        var point    = new google.maps.LatLng(parseFloat($(this).attr('lat')),parseFloat($(this).attr('lng')));
        create_marker(point, name, address, false, false, false, "icons/pin_blue.png");
    });
});
```

Custom Logic



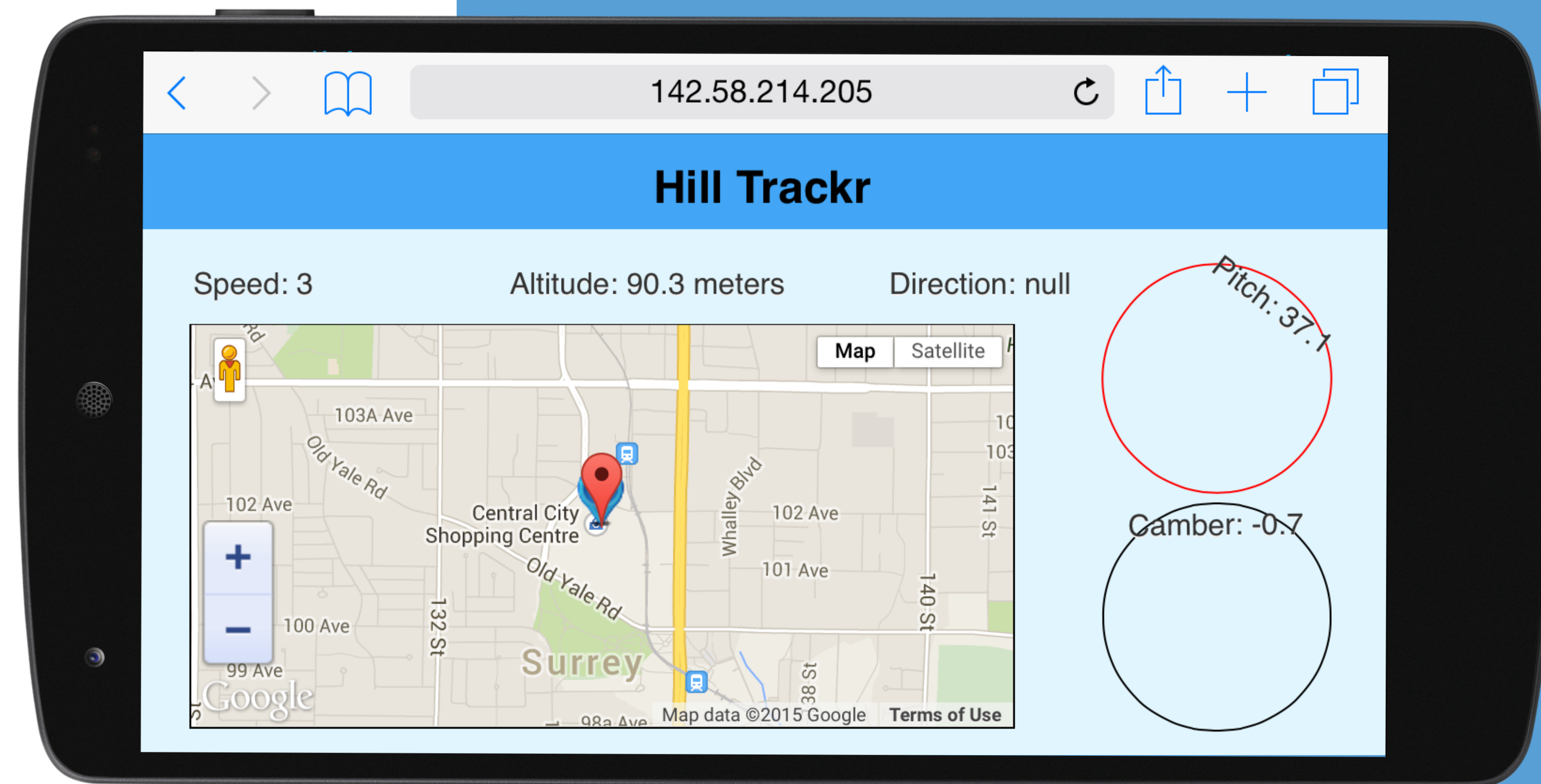
Custom Logic

Plot Hills

```
if(gamma > 30){  
  
    if((angle2) > gamma){  
  
        angle2 = 0;  
  
        create_marker(pos, 'New Marker', EditForm, true, true, true, "../icons/pin_green.png");  
  
        // alert(beta);  
        var myVar=setInterval(function () {  
  
            }, 3000);  
        // if(beta >= 30 || beta <= -30){  
  
        }  
    }  
}
```

Rotating Visuals

```
dataGamma.style.webkitTransform = 'rotate('+gamma+'deg)';  
dataGamma.style.mozTransform = 'rotate('+gamma+'deg)';  
dataBeta.style.webkitTransform = 'rotate('+beta+'deg)';  
dataBeta.style.mozTransform = 'rotate('+beta+'deg)';
```



Wrap up

