



# HTML5 Mobile Web Development

**Jake Carter**

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## About the instructor



**Jake Carter** is a web and software developer at RogueSheep, an award-winning Seattle-based company dedicated to creating top-tier applications that focus on design and usability. While he currently develops for Apple's iOS devices, Jake has a personal and professional enthusiasm for web standards. Staying on the cutting edge of technology is more than just a job for Jake—it's a passion.

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# Week 10 Tip Sheet

## Device Motion

The DeviceMotion and DeviceOrientation APIs are used to access the device's accelerometer and gyroscope information.

To listen for changes of the accelerometer listen for the “devicemotion” event on the ‘window’ object.

### Example

```
window.addEventListener("devicemotion", function() {  
    // Acceleration with gravity.  
    var xG = event.accelerationIncludingGravity.x;  
    var yG = event.accelerationIncludingGravity.y;  
    var zG = event.accelerationIncludingGravity.z;  
  
    // Acceleration without gravity.  
    // Must have gyroscope to get this info.  
    var x = event.acceleration.x;  
    var y = event.acceleration.y;  
    var z = event.acceleration.z;  
}, false);
```

To listen for changes of the gyroscope listen for the “deviceorientation” event on the ‘window’ object.

### Example

```
window.addEventListener("deviceorientation", function() {  
    // Acceleration with gravity.  
    var a = event.alpha;  
    var b = event.beta;  
    var g = event.gamma;  
}, false);
```

### Related Links

<https://developer.apple.com/library/safari/#documentation/SafariDOMAdditions/Reference/DeviceMotionEventClassRef/DeviceMotionEvent/DeviceMotionEvent.html>

[https://developer.apple.com/library/safari/#documentation/SafariDOMAdditions/Reference/DeviceOrientationEventClassRef/DeviceOrientationEvent/DeviceOrientationEvent.html%23apple\\_ref/doc/uid/TP40010526](https://developer.apple.com/library/safari/#documentation/SafariDOMAdditions/Reference/DeviceOrientationEventClassRef/DeviceOrientationEvent/DeviceOrientationEvent.html%23apple_ref/doc/uid/TP40010526)

## Examples

<http://mrgan.com/pieguy/>

<http://www.20thingsilearned.com/>

<http://html5gallery.com/>

<http://www.chromeexperiments.com/>

## Libraries

<http://jqtouch.com/>

<http://jquerymobile.com/>

<http://www.sencha.com/>

<http://processingjs.org/>

## Blogs

<http://html5doctor.com/>

<http://html5watch.tumblr.com/>

<http://net.tutsplus.com/>

<http://line25.com/>

<http://www.alistapart.com/>

<http://css-tricks.com/>