

HTML5 Device APIs

Tomomi Imura (@girlie_mac)



Device APIs

- GPS
- Camera, Video, & Microphone
- Audio HW
- Vibration HW
- Battery
- NFC

Device APIs - Sensors

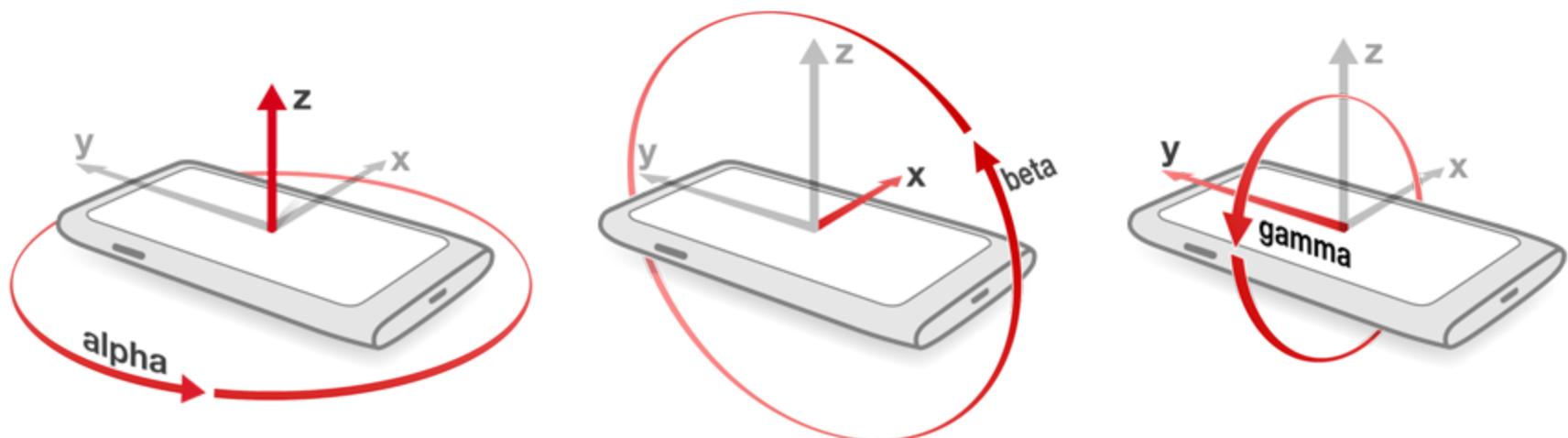
- Accelerometer
- Magnetometer
- Gyrometer
- Light
- Proximity
- Barometer (Pressure)

Geolocation

```
if (navigator.geolocation) {  
    navigator.geolocation.getCurrentPosition(success, fail);  
}  
function success(position) {  
    alert('Latitude: ' + position.coords.latitude +  
        ', Longitude: ' + position.coords.longitude);  
}
```



Device Orientation Events



```
if (window.DeviceOrientationEvent) {  
    window.addEventListener('deviceorientation', function(e) {  
        compass = e.alpha; // degree  
        frontBack = e.beta;  
        leftRight = e.gamma;  
        ...  
    }, false);  
}
```

Partial support



4.2



3.0



18



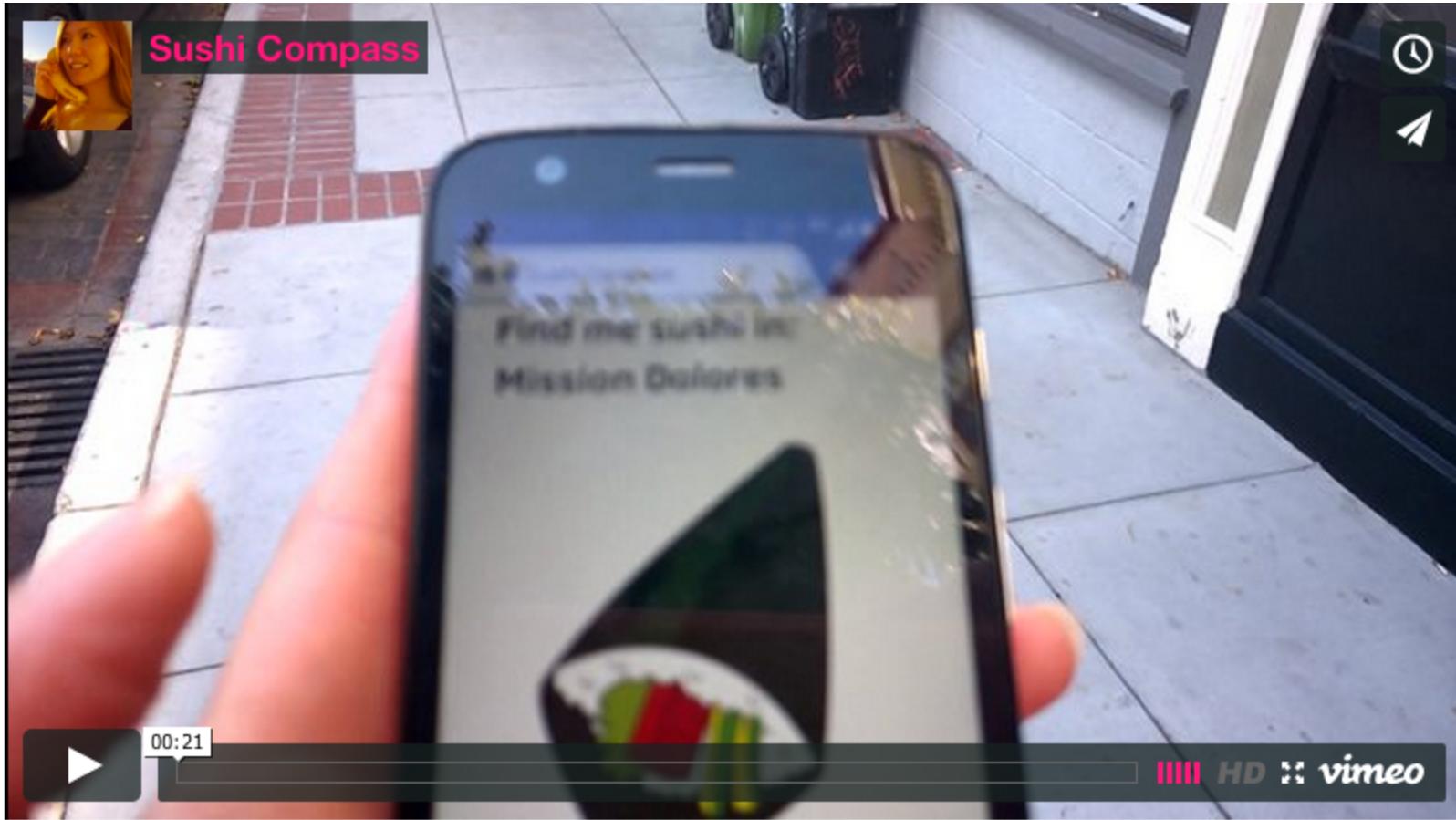
10



14



12



Watch the demo video at: <https://vimeo.com/92208773>

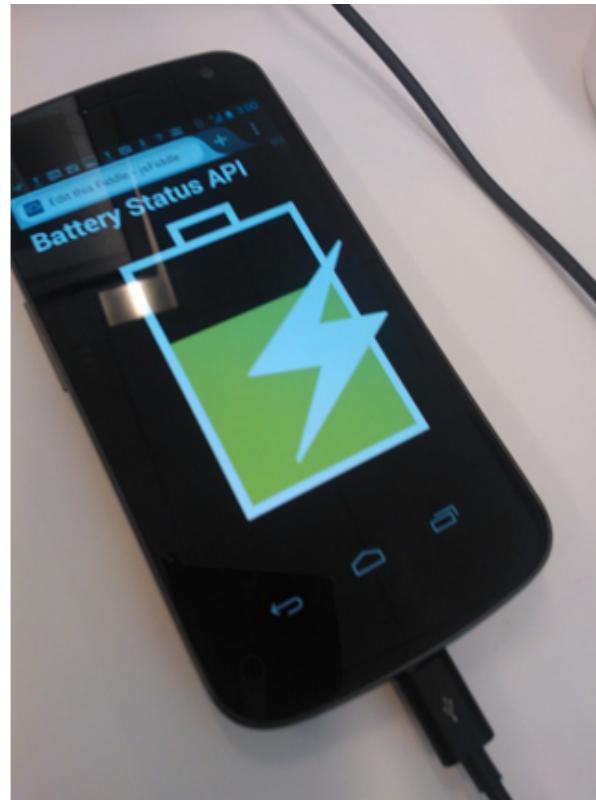
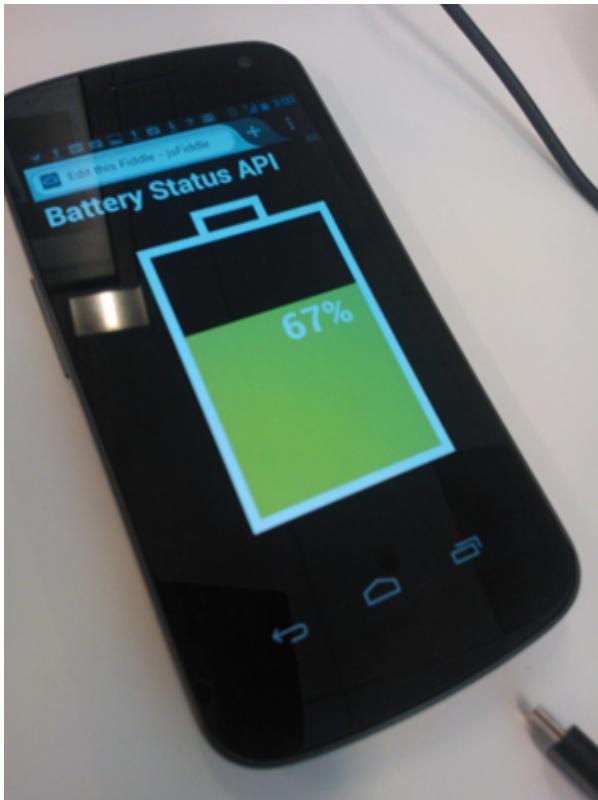
Demo: <http://girliemac.github.com/sushi-compass>

Battery Status API

```
var battery = navigator.battery || navigator.mozBattery;  
  
battery.addEventListener('chargingchange', updateStatus);  
battery.addEventListener('levelchange', updateStatus);  
  
function updateStatus() {  
    alert('Battery status: ' + battery.level * 100 + ' %');  
    if (battery.charging) {  
        alert('Battery is charging...');  
    }  
}
```



Battery Status API

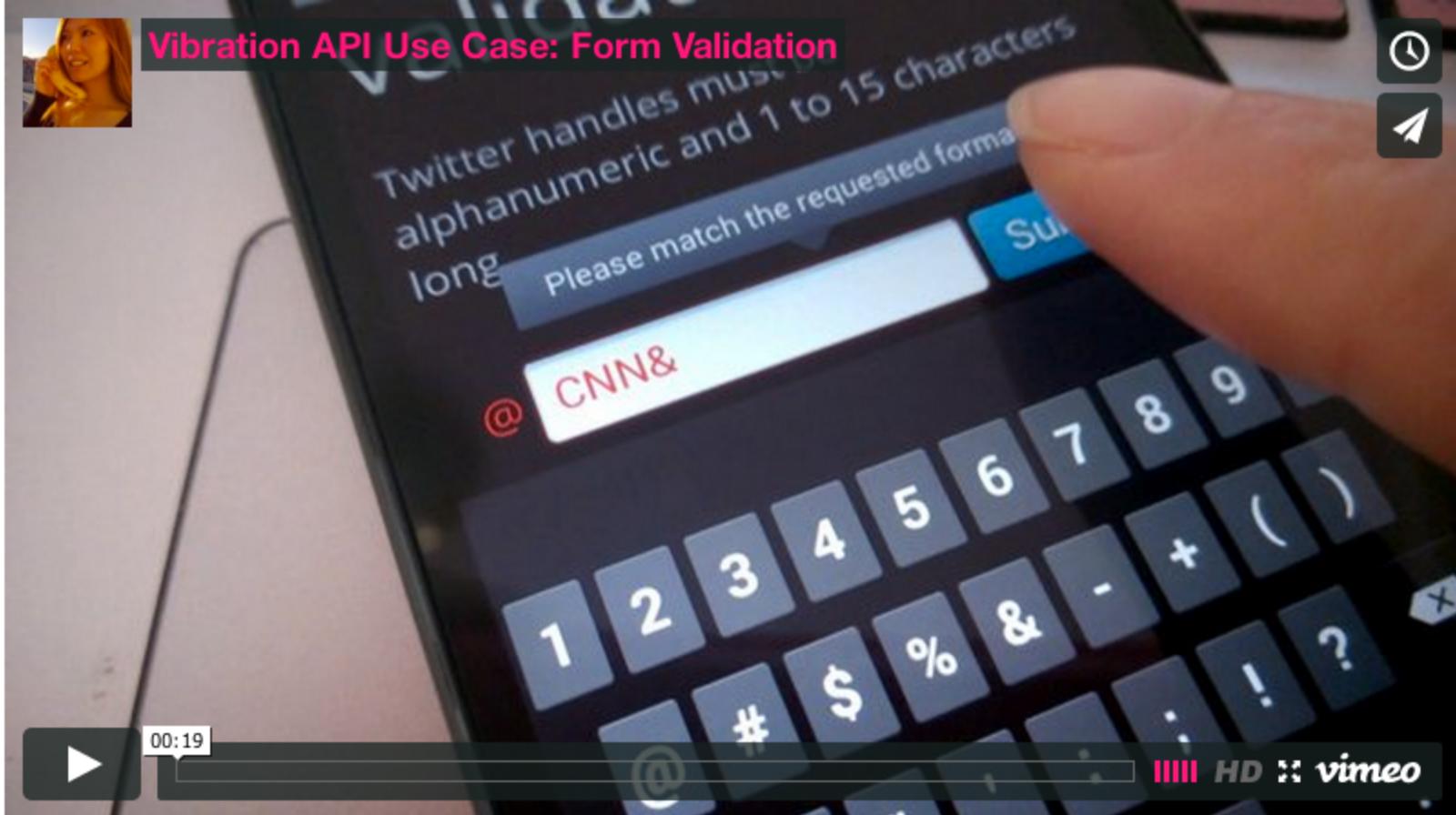


<http://goo.gl/V1n6h> (Pictured: Firefox)

Vibration API

```
var vibrate = navigator.vibrate || navigator.mozVibrate;  
  
// vibrate for 1sec  
vibrate(1000);  
  
// vibrates for 1sec, still for 0.5 seconds,  
// and vibrates again for 2sec  
vibrate([1000, 500, 2000]);
```





Watch the demo video at: <https://vimeo.com/86735842>

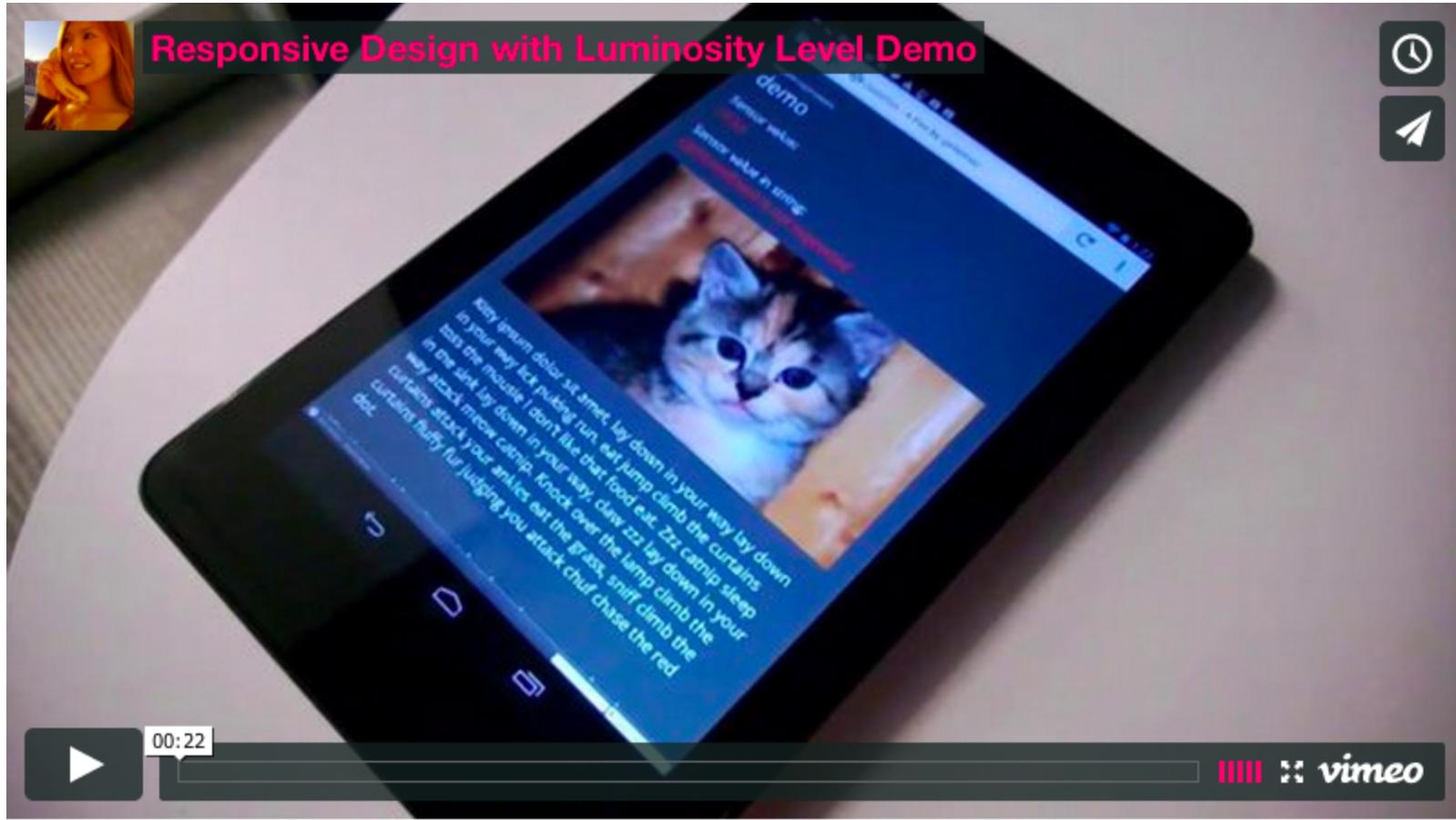
Demo: <http://goo.gl/SFzKaH>

Ambient Light Events

```
window.addEventListener('devicelight', function(e) {  
    alert(e.value);  
});
```

Returned value (in lux)	My Observations
< 400	Indoor
400-1000	Office lighting. Outdoor (in foggy San Francisco)
> 1000	Outdoor daylight (anywhere else in California)





Watch the demo video at: <https://vimeo.com/79466285>

Demo: <http://codepen.io/girliemac/pen/pvmBs>

Keep up to date



Chromium Dashboard  www.chromestatus.com/features

what we're up to

Features CSS Metrics JS/HTML Metrics

Web Platform Features (168)

Filter ?

No active development

Proposed

In development

- 36 canary
- 35 dev
- 34 beta
- 33 stable
- 32
- 31
- 30
- 29
- 28
- 27
- 26

<picture> Element Misc

Enable a responsive images solution by declaring multiple resources for an image using CSS media queries.

Blending of elements - obsolete entry CSS

Offers more ways to combine HTML elements.

CSS Intrinsic Sizing CSS

Extends the CSS sizing properties with keywords that represent content-based "intrinsic" sizes and context-...

CSS font-stretch CSS

Add support the the CSS font-stretch property.

CSSOM View smooth scroll API CSS

Adds an optional argument to existing scroll APIs that specifies whether scrolling should be smooth. Also ad...

Canvas rendering from workers

Except as otherwise noted, the content of this page is licensed under a [Creative Commons Attribution 2.5 license](#), and examples are licensed under the [BSD License](#).

[Report content issues](#) | [Report site issues](#) | [Request "edit" access](#) | [About this page](#) | [Login](#)

status.modern.ie/#/ status.modern.ie/#/ 

Filter... Add

Features found: 123 Sorting ▾ Technologies ▾ Browsers ▾ Status ▾

-  Generated Content for Paged Media Module
-  Geolocation IE9+ ▾
-  getUserMedia Under Consideration ▾
-  Gradients IE10+ ▾
-  Grid IE10+ ▾
-  High Resolution Time IE10+ ▾
-  HTML Imports Under Consideration ▾
-  HTTP Client Hints Under Consideration ▾

Köszönöm!

Tomomi Imura

- girliemac.com
- twitter.com/girlie_mac
- github.com/girliemac

