

# OFFLINE WEB APPS WITH HTML5

Macworld 2007 Keynote



WWDC 2007



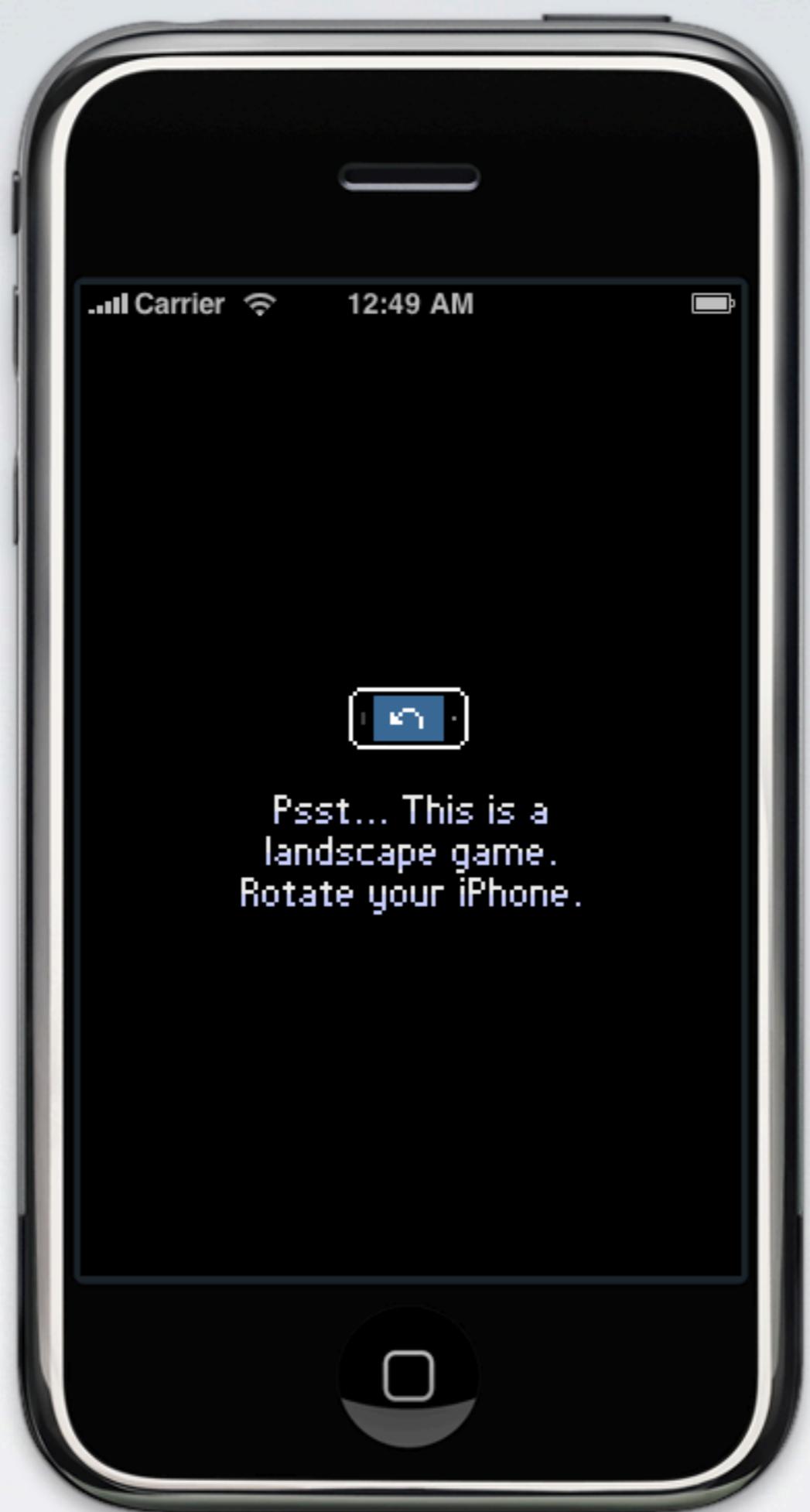
WWDC 2007

“...THE IPHONE WOULD SUPPORT THIRD-PARTY "WEB APPLICATIONS" WRITTEN IN AJAX THAT SHARE THE LOOK AND FEEL OF THE IPHONE INTERFACE”

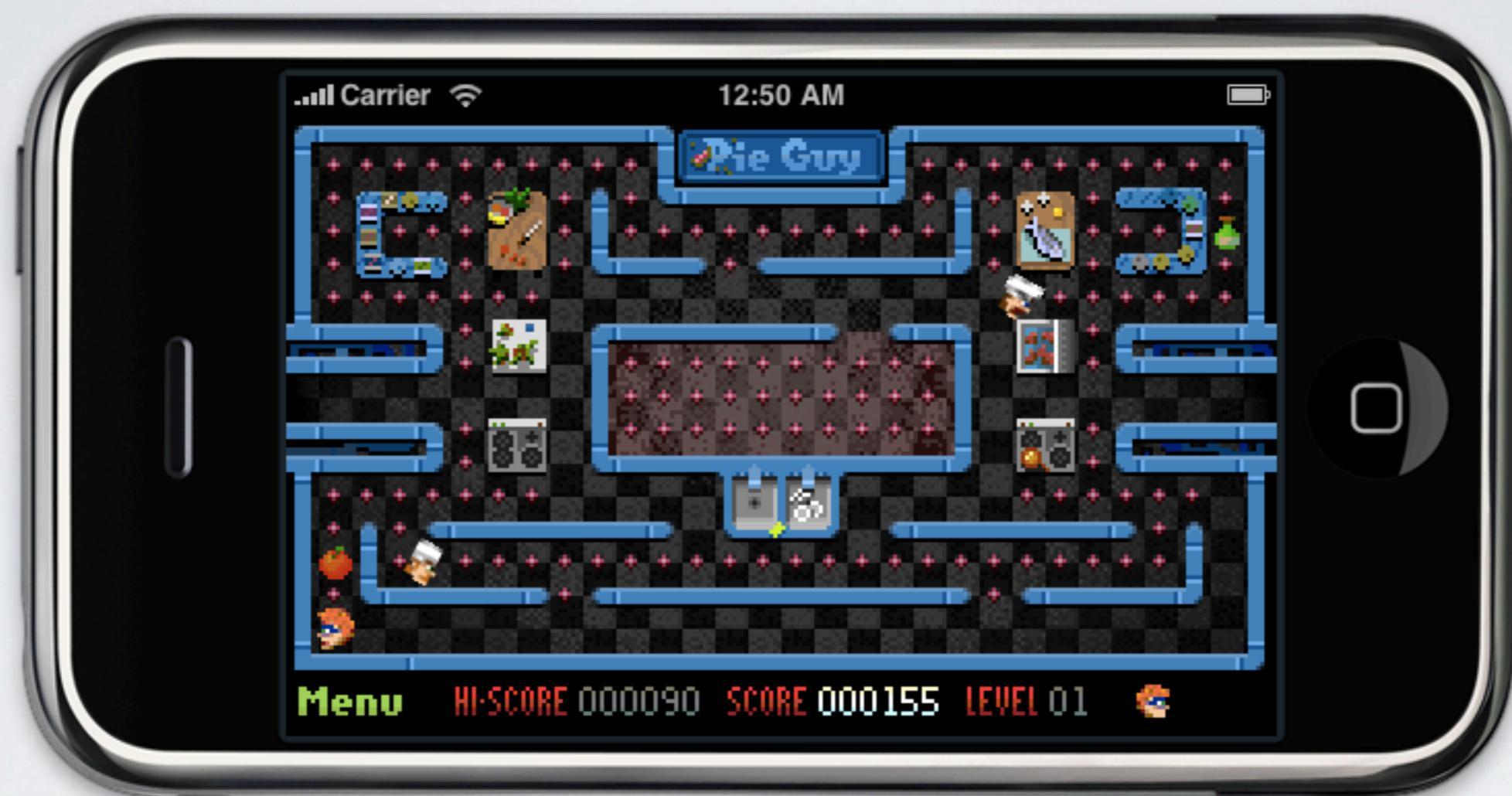
Apple Press Release, June 11, 2007

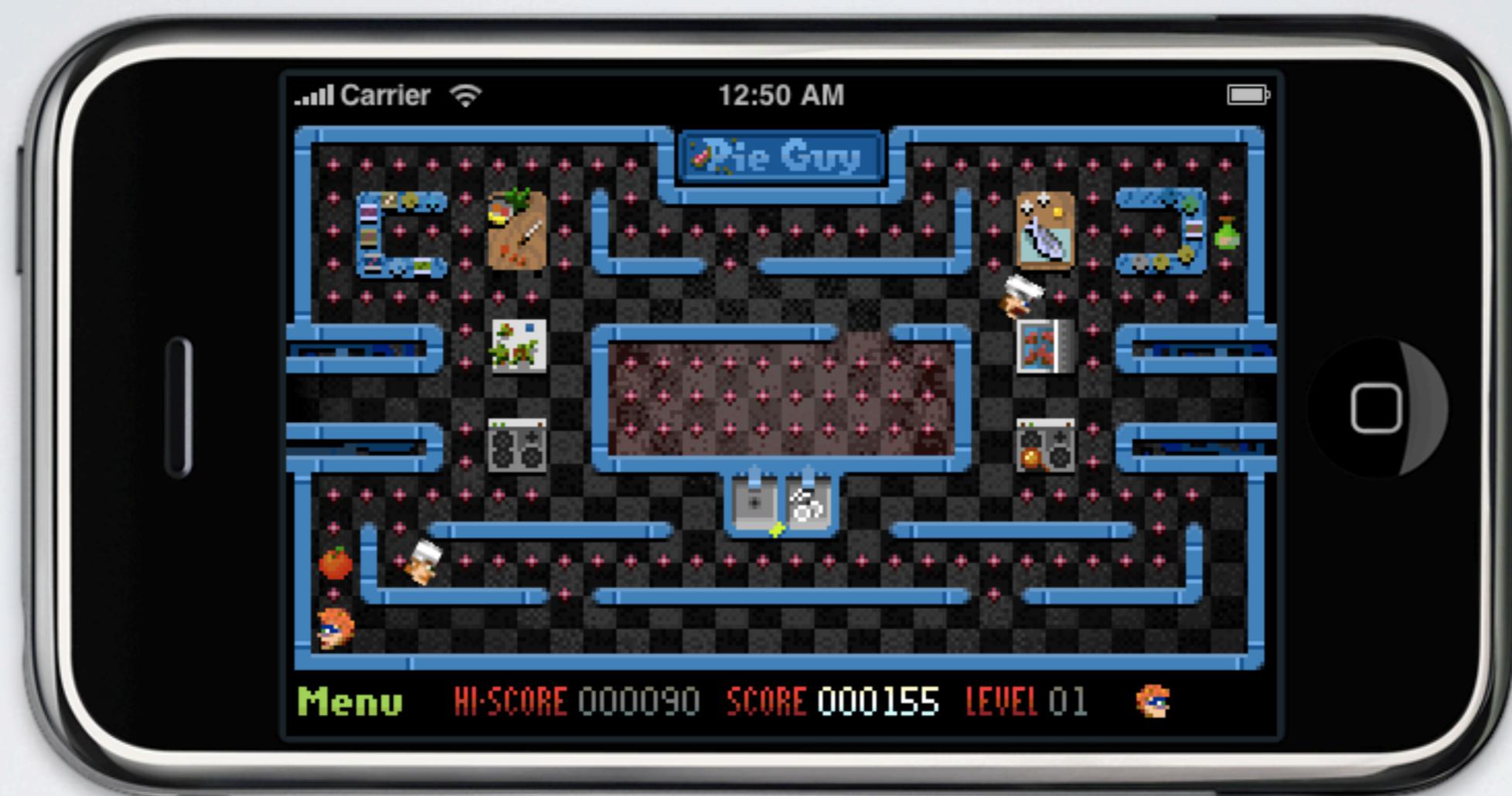
SRSLY?

**YES!**









[mrgan.com/pieguy](http://mrgan.com/pieguy)





mrgan.com/gb



[icanhaz.com/rubiks](http://icanhaz.com/rubiks)

# HOW?

# HTML5 + CSS3

# EASIER SYNTAX

```
<!DOCTYPE html
    PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
    lang="en"
    xml:lang="en">
```

```
<!DOCTYPE HTML>
<html lang="en">
```

```
<input type="email">
```



```
<form>
```

```
    <input name="addr" type="e
```

```
    <input type="submit" value="
```

Previous Next AutoFill Done

Q W E R T Y U I O P

A S D F G H J K L

↑ Z X C V B N M ←

\_123 space @ . Go

NEAT.

# CANVAS



[icanhaz.com/rubiks](http://icanhaz.com/rubiks)

# Every Time Zone

Never warp your brain  
with time zone math again.

design by [Amy Hoy](#) & dev by [Thomas Fuchs](#)  
iPad: works offline (tap + to add to home screen)

1:11 am  
current local time

3:03 pm  
your local time

Honolulu UTC-10 (DST)

3:03 am

San Francisco UTC-7 (DST)

6:03 am

Chicago UTC-5 (DST)

8:03 am

New York UTC-4 (DST)

9:03 am

Rio de Janeiro UTC-3

10:03 am

London UTC+1 (DST)

2:03 pm

Vienna UTC+2 (DST)

3:03 pm

Mumbai UTC+5:30

6:33 pm

Hong Kong UTC+8

9:03 pm

Tokyo UTC+9

10:03 pm

Sydney UTC+10

11:03 pm

# CSS3

HTTP://IDZR.ORG/404

# VIDEO + AUDIO



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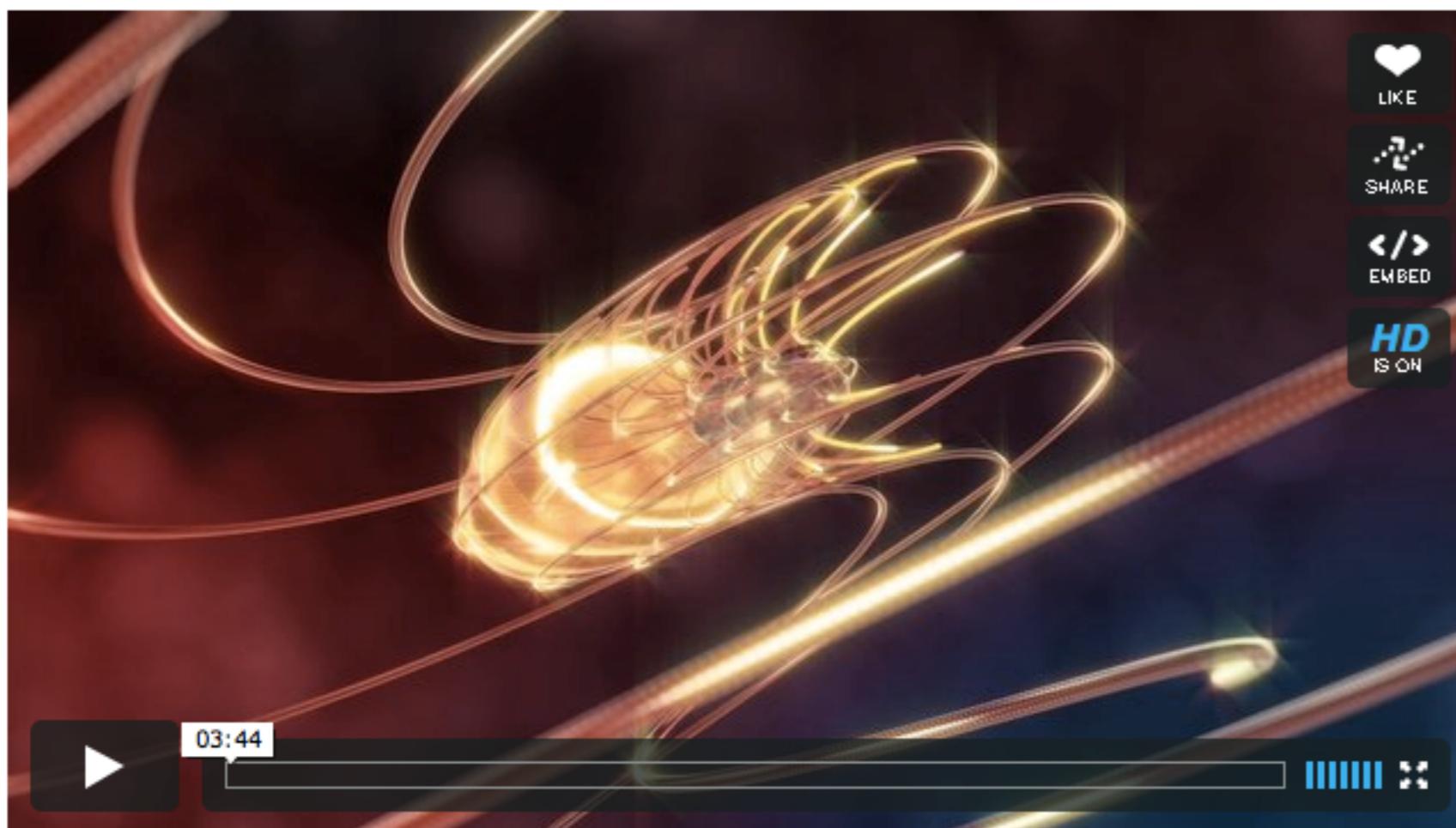
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## Nature by Numbers

by Cristóbal Vila PLUS

2 months ago



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Cristóbal Vila's video ▾

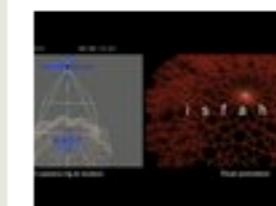
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8. **Nature by Numbers**  
by Cristóbal Vila  
2 months ago



7. **Fallingwater Camera Rig**  
by Cristóbal Vila  
1 year ago



6. **Isfahan Camera Rig**  
by Cristóbal Vila  
1 year ago

A SHORT MOVIE INSPIRED ON NUMBERS, GEOMETRY AND NATURE.

Go to [etereastudios.com](http://etereastudios.com) if you are looking for more information: the theory behind the movie (Fibonacci, Golden Ratio, Delaunay, Voronoi...), stills and screenshots showing the work in progress. There are lots of free training materials and 3D workshops, too ;-)

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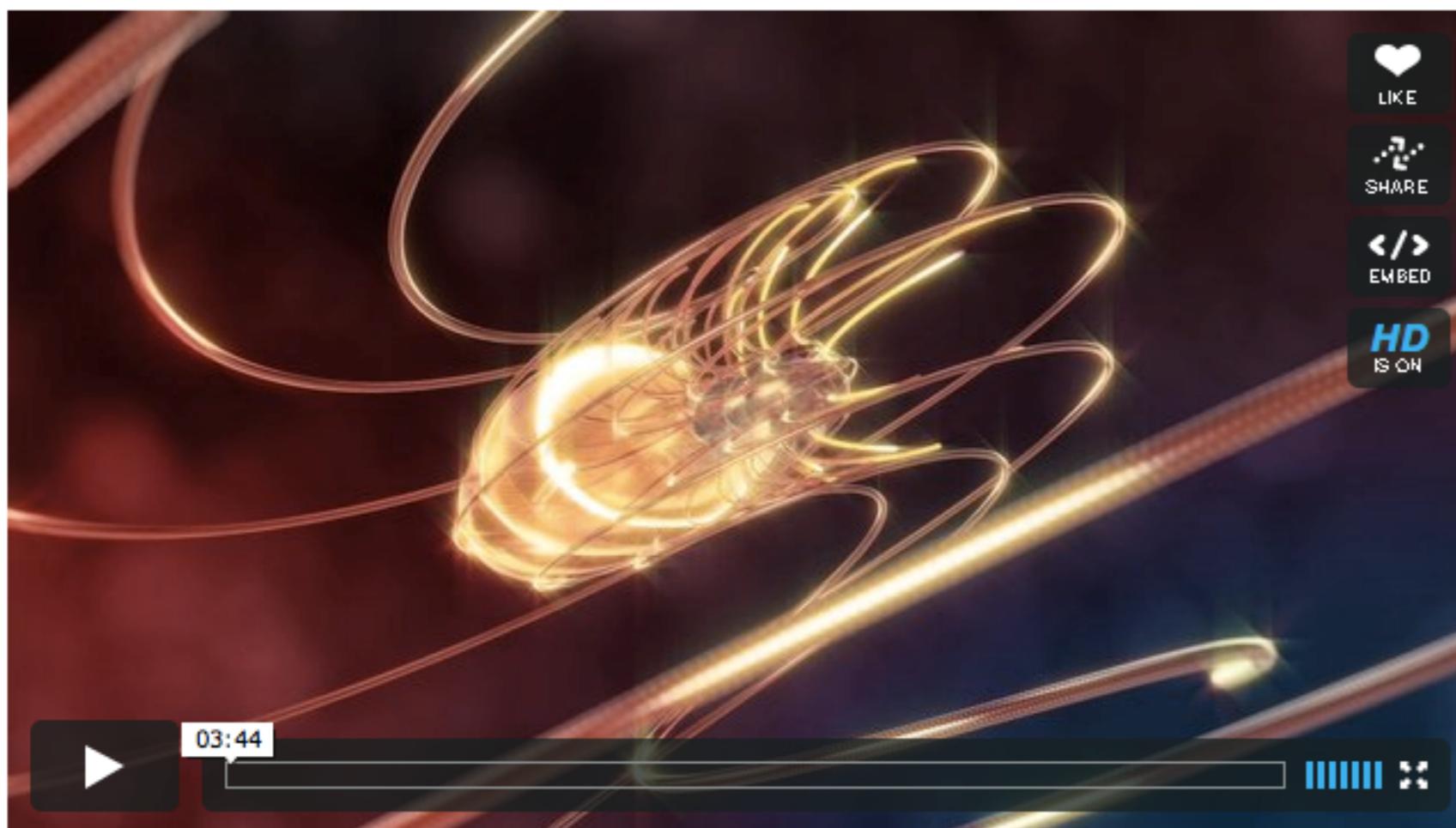
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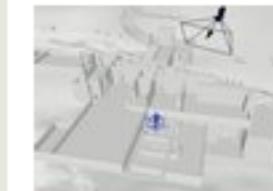
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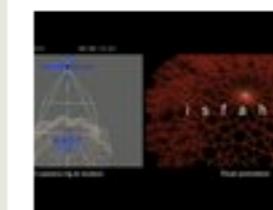
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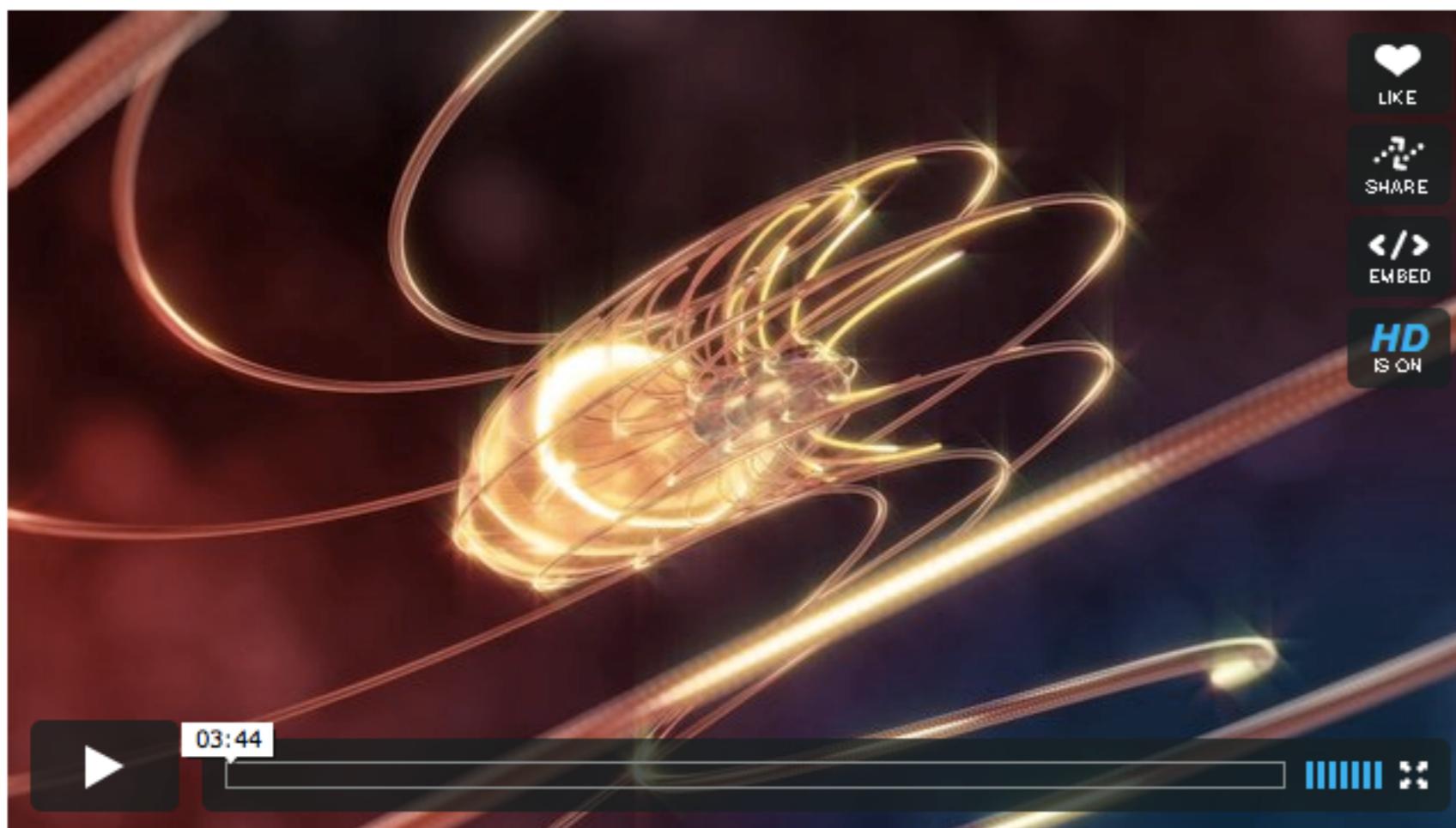
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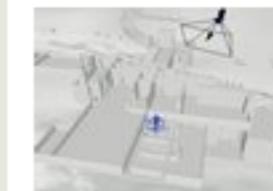
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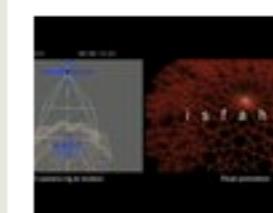
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SWEET.



[mrgan.com/gb](http://mrgan.com/gb)

# OFFLINE WEB APPLICATIONS

# LOCAL STORAGE

# GEOLOCATION

# EXAMPLE

```
<!DOCTYPE HTML>
<html manifest="clock.manifest">
<head>
    <title>Clock</title>
    <script src="clock.js"></script>
    <link rel="stylesheet" href="clock.css">
</head>
<body onload="clock()">
    <p>The time is: <output id="clock"></output></p>
</body>
</html>
```

CACHE MANIFEST  
clock.html  
clock.css  
clock.js

Content-Type: text/cache-manifest

The time is: **Thu May 06 2010 13:03:37 GMT+0200 (CEST)**

<http://notepad.nuclearsquid.com/clock>



# NOTE PAD

# NOTE PAD (WITH GEOLOCATION)

# NOTE PAD (WITH GEOLOCATION) (THAT WORKS OFFLINE)

# EINGABEFELD

# NOTES LIST

# LOCAL STORAGE

# 3 KINDS OF LOCAL STORAGE

```
sessionStorage.username = "John";  
console.log(sessionStorage.username);
```

```
sessionStorage.username = "John";  
console.log(sessionStorage.username);  
  
localStorage.username = "John";  
console.log(localStorage.username);
```

```
sessionStorage.username = "John";
console.log(sessionStorage.username);

localStorage.username = "John";
console.log(localStorage.username);

var database = openDatabase("DB Name",
                            "DB Version",
                            ...);

database.execSQL("SELECT * FROM test",
function(result1) {
    // do something with the results
    database.execSQL("DROP TABLE test",
function(result2) {
    // do some more stuff
    console.log("done!");
    },
...
},
...
);
```

```
function positionWatcher(location){  
    $("longitude").textContent = location.coords.longitude;  
    $("latitude").textContent = location.coords.latitude;  
}  
navigator.geolocation.watchPosition(positionWatcher);
```

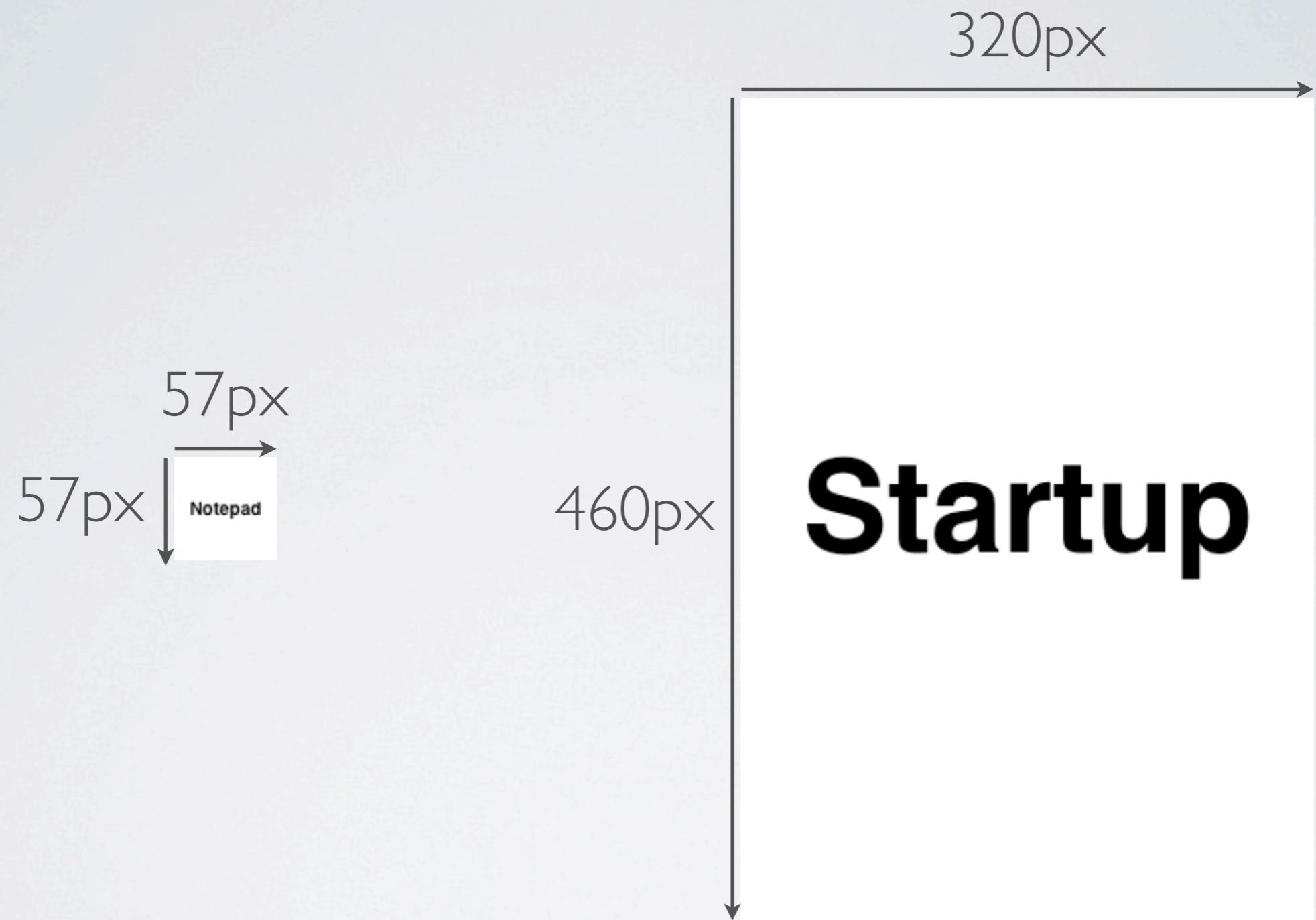
```
function positionWatcher(location){  
    $("longitude").textContent = location.coords.longitude;  
    $("latitude").textContent = location.coords.latitude;  
}  
navigator.geolocation.watchPosition(positionWatcher);  
  
navigator.geolocation.getCurrentPosition(function(location){  
    $("longitude").textContent = location.coords.longitude;  
    $("latitude").textContent = location.coords.latitude;  
});
```





```
<meta name="apple-mobile-web-app-capable" content="yes" />
```

```
<link rel="apple-touch-icon" href="iphone_app_icon.png"/>
<link rel="apple-touch-startup-image" href="startup.png" />
```



```
<meta name="apple-mobile-web-app-status-bar-style"  
content="black" />
```

```
<meta name="viewport" content="width=device-width;  
height=device-height; initial-scale=1.0; maximum-scale=1.0;  
user-scalable=no;" />
```

```
<body>
  <div id="loading" style="position: absolute; left: 0; top: 0;">
    Loading....
  </div>

  <div id="noiphone" style="visibility: hidden; position: absolute; left: 0; top: 0;">
    This is an iPhone web app. Load this page on an iPhone!
  </div>

  <div id="notinstalled" style="visibility: hidden; position: absolute; left: 0; top: 0;">
    To install this web app, tap the + button at the bottom of the page, then select "Add to Home Screen".
  </div>

  <div id="nonavigation" style="visibility: hidden; position: absolute; left: 0; top: 0;">
    Location services aren't available for some reason.
  </div>

  <div id="navigation" style="visibility: hidden;">
    Longitude: <span id="longitude">N/A</span>
    <br>
    Latitude: <span id="latitude">N/A</span>
  </div>

  <div id="main" style="visibility: hidden;">
    <div id="status"></div>
    <form id="notepad" name="notepad">
      <textarea id="note" name="note" cols="41" rows="10"></textarea>
      <input type="button" value="Save" onclick="saveNote()">
    </form>
    <h2>Notes:</h2>
    <ol id="list">
    </ol>
  </div>
</body>
```

```
// no iPhone
if(navigator.appVersion.indexOf('iPhone OS ') < 0)
{
  $("noiphone").style.visibility = "visible";
}
else if(!window.navigator.standalone)
{
  $("notinstalled").style.visibility = "visible";
}
// has navigation?
else if(!(typeof navigator.geolocation != "undefined"))
{
  $("nonavigation").style.visibility = "visible";
}
else
{
  // we're on a phone, and installed standalone
  // "real" app init code goes here
  $("navigation").style.visibility = "visible";
  $("main").style.visibility = "visible";

  navigator.geolocation.watchPosition(positionWatcher);

  updateNoteList();
}
```

(note to self: Show stuff in TextMate here)

notepad.nuclearsquid.com

Pro Tip:  
iPhone Simulator != Mobile Safari

Vienna.js  
(<http://viennajs.org>)

# STALK ME!

- @cypher (<http://twitter.com/cypher>)
- <http://github.com/cypher>
- <http://nuclearsquid.com> (Blogity Blog)
- <http://soup.io> (Workity Work)