Tamkang University

Social Media Apps Programming

Mobile Apps using HTML5/CSS3/JavaScript

1061SMAP05
TLMXM1A (8648) (M2143) (Fall 2017)
(MIS MBA) (2 Credits, Elective) [Full English Course]
Fri 8,9 (15:10-17:00) B206

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Department of Information Management
Tamkang University

http://mail.tku.edu.tw/myday

2017-10-20

Course Schedule (1/2)

Tamkang University

Week	Date	Subject/Topics
1	2017/09/22	Course Orientation and Introduction to Social Media and Mobile Apps Programming
2	2017/09/29	Introduction to Android / iOS Apps Programming
3	2017/10/06	Developing Android Native Apps with Java (Android Studio)
4	2017/10/13	Developing iPhone / iPad Native Apps with Swift (XCode)
5	2017/10/20	Mobile Apps using HTML5/CSS3/JavaScript
6	2017/10/27	jQuery Mobile
7	2017/11/03	Create Hybrid Apps with Phonegap
8	2017/11/10	jQuery Mobile/Phonegap
9	2017/11/17	jQuery Mobile/Phonegap

Course Schedule (2/2)

Tamkang University

Week	Date	Subject/Topics
10	2017/11/24	Midterm Project Report
11	2017/12/01	Case Study on Social Media Apps Programming and Marketing in Google Play and App Store
12	2017/12/08	Google Cloud Platform
13	2017/12/15	Google App Engine
14	2017/12/22	Google Map API
15	2017/12/29	Facebook API (Facebook JavaScript SDK) (Integrate Facebook with iOS/Android Apps)
16	2018/01/05	Twitter API
17	2018/01/12	Final Project Presentation
18	2018/01/19	Final Exam Week (Final Project Presentation)

Android /iOS Apps Programming

Native Apps

Hybrid Apps

Mobile Web Apps

App Development Comparison

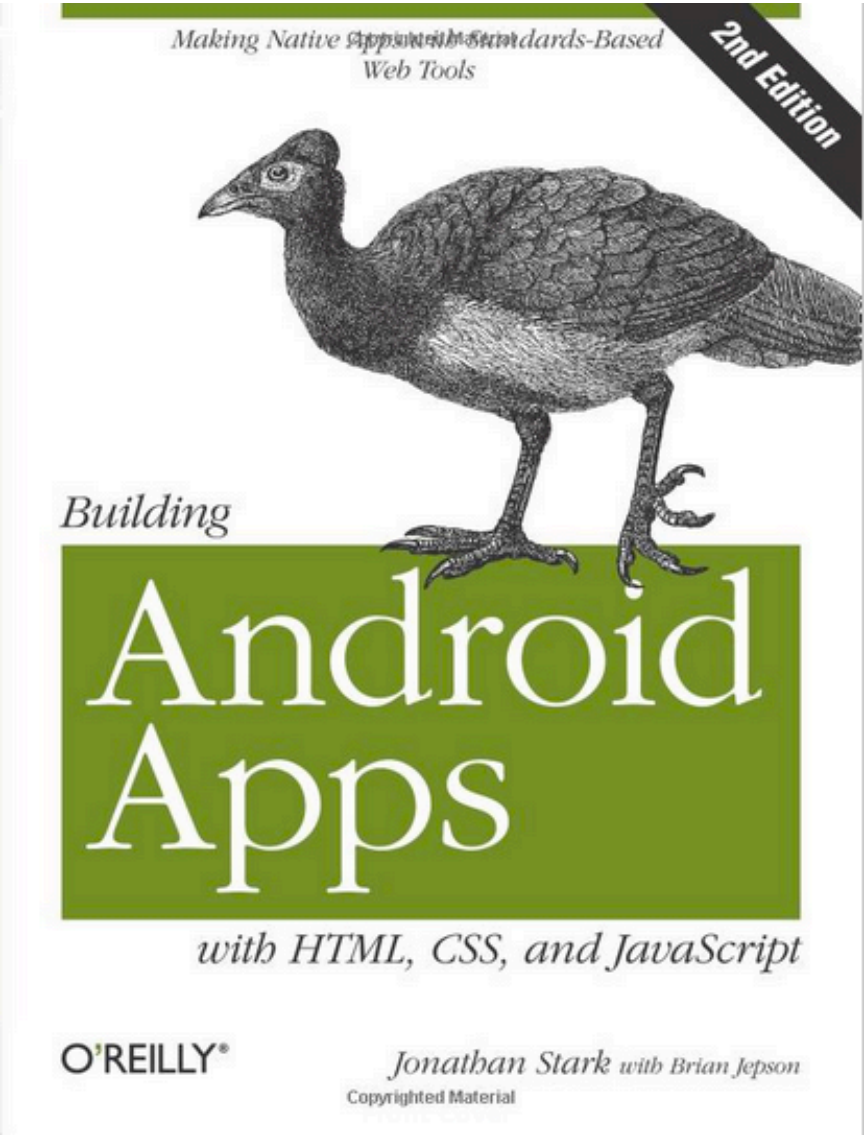
	Device Access	Speed	Development Cost	App Store	Approval Process
Native Apps	Full	Very Fast	Expensive	Available	Mandatory
Hybrid Apps	Full	Native Speed as Necessary	Reasonable	Available	Low Overhead
Web Apps	Partial	Fast	Reasonable	Not Available	None

Source: http://www.scribd.com/doc/50805466/Native-Web-or-Hybrid-Mobile-App-Development

Outline

- Mobile Apps
- HTML5
  - **H**yper **T**ext **M**arkup **L**anguage (version 5)(2014)
  - Content and Structure
- CSS3
  - Cascading Style Sheets (version 3)
  - Presentation, Layout and User Interface
- JavaScript
  - Behavior and Business Logic

Building Android Apps with HTML, CSS, and JavaScript: Making Native Apps with Standards-Based Web Tools, Jonathan Stark & Brian Jepson, O'reilly, 2012

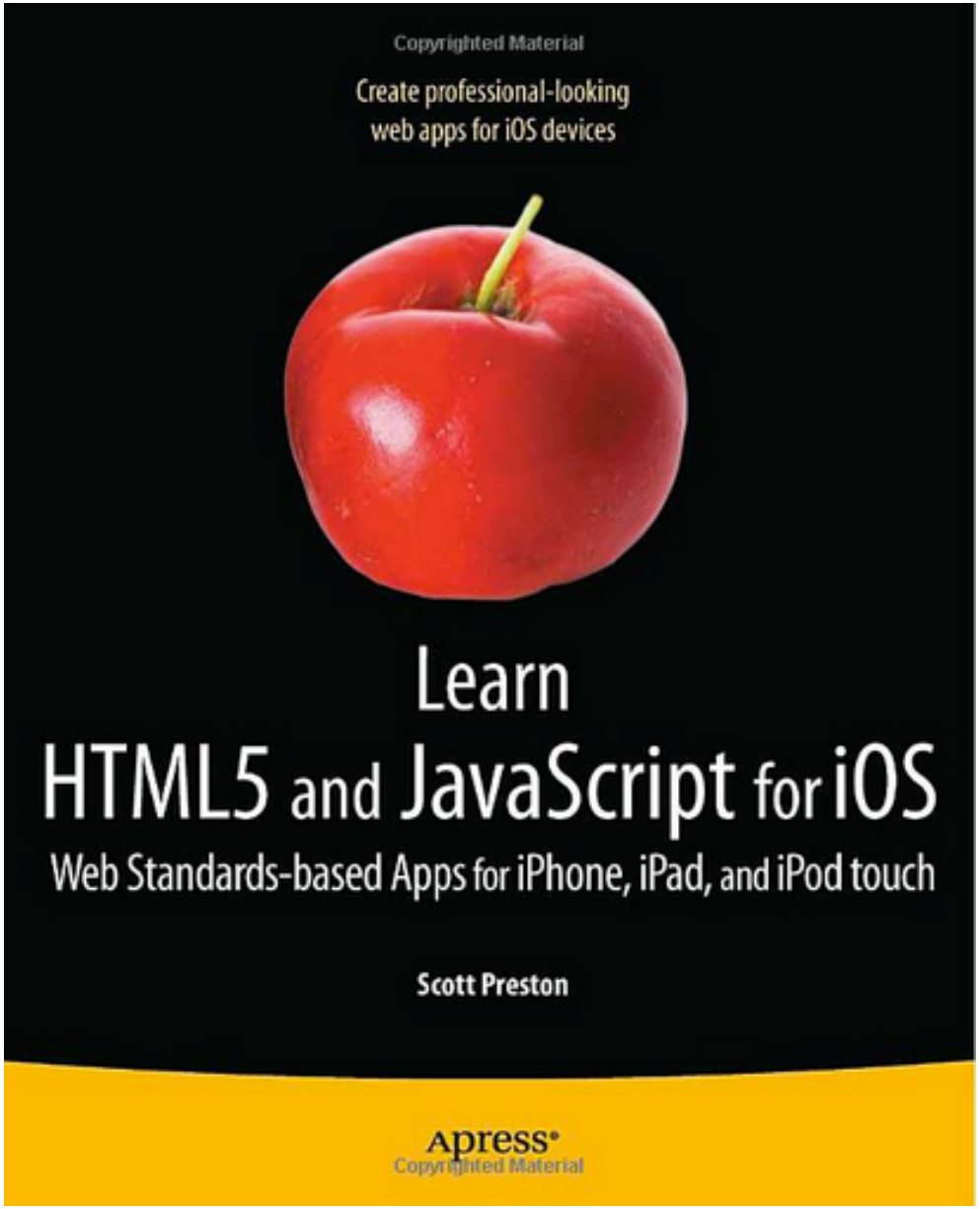


Source: http://www.amazon.com/Building-Android-Apps-HTML-JavaScript/dp/1449316417

Building iPhone Apps with HTML, CSS, and JavaScript: Making App Store Apps Without Objective-C or Cocoa, Jonathan Stark, O'reilly, 2010

Source: http://www.amazon.com/Building-iPhone-Apps-HTML-JavaScript/dp/0596805780

Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Scott Preston, Apress, 2012



Source: http://www.amazon.com/Learn-HTML5-JavaScript-iOS-Standards-based/dp/1430240385

Learn HTML5 and JavaScript for iOS

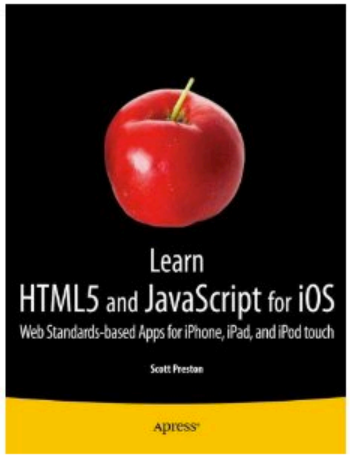
Learn HTML5 and JavaScrip

www.learnhtml5book.com

Companion Website for the book: Learn HTML5 and JavaScript for iOS.

Chapters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Learn HTML5 and JavaScript for iOS



This site features a series of examples for every chapter. Look at the site on your desktop, iPad or iPhone as you read the book. Click "View Source" in your browser or go to the Apress download zip to see the source code for each example.

What you see in the book might only be part of the code needed to demonstrate an idea or concept, but the this site has everything you need, like additional JS, or CSS, or rendered HTML.

The Real World Example Site

www.grandviewave.com/m

The Grandview Avenue site was written in 2010 and continues to evolve. It's a real site designed to give local businesses an app and mobile site presence.

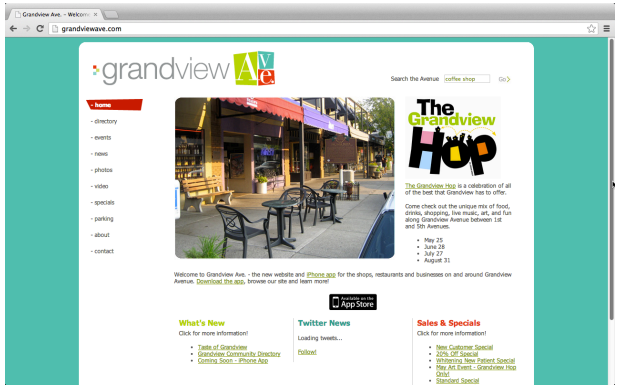
Each chapter in the book ends with a section called "Putting It All Together", in which I show you how I apply the concepts in the chapter to this real world application.

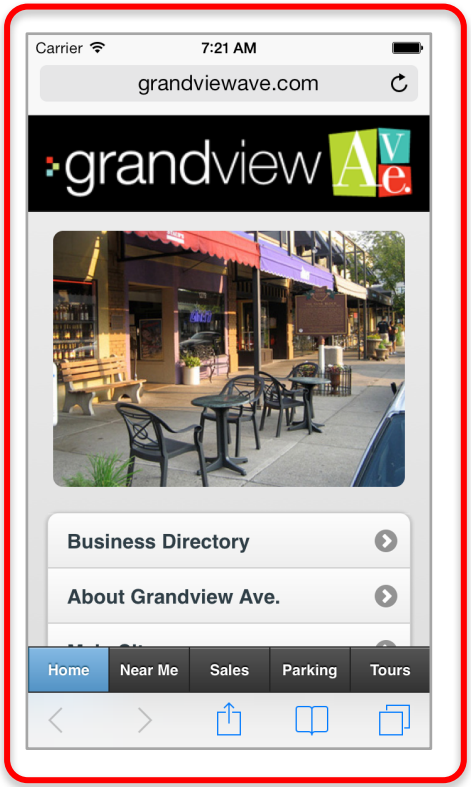
Hopefully you can see how this site works and either build one like it yourself, or do something completely different.

http://www.learnhtml5book.com/

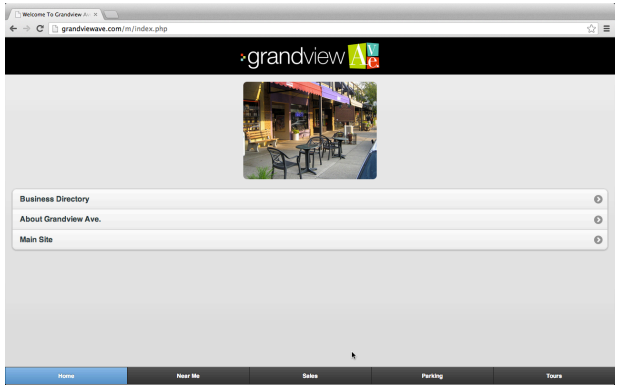
Mobile Apps

- Mobile Website
  - Classic Website





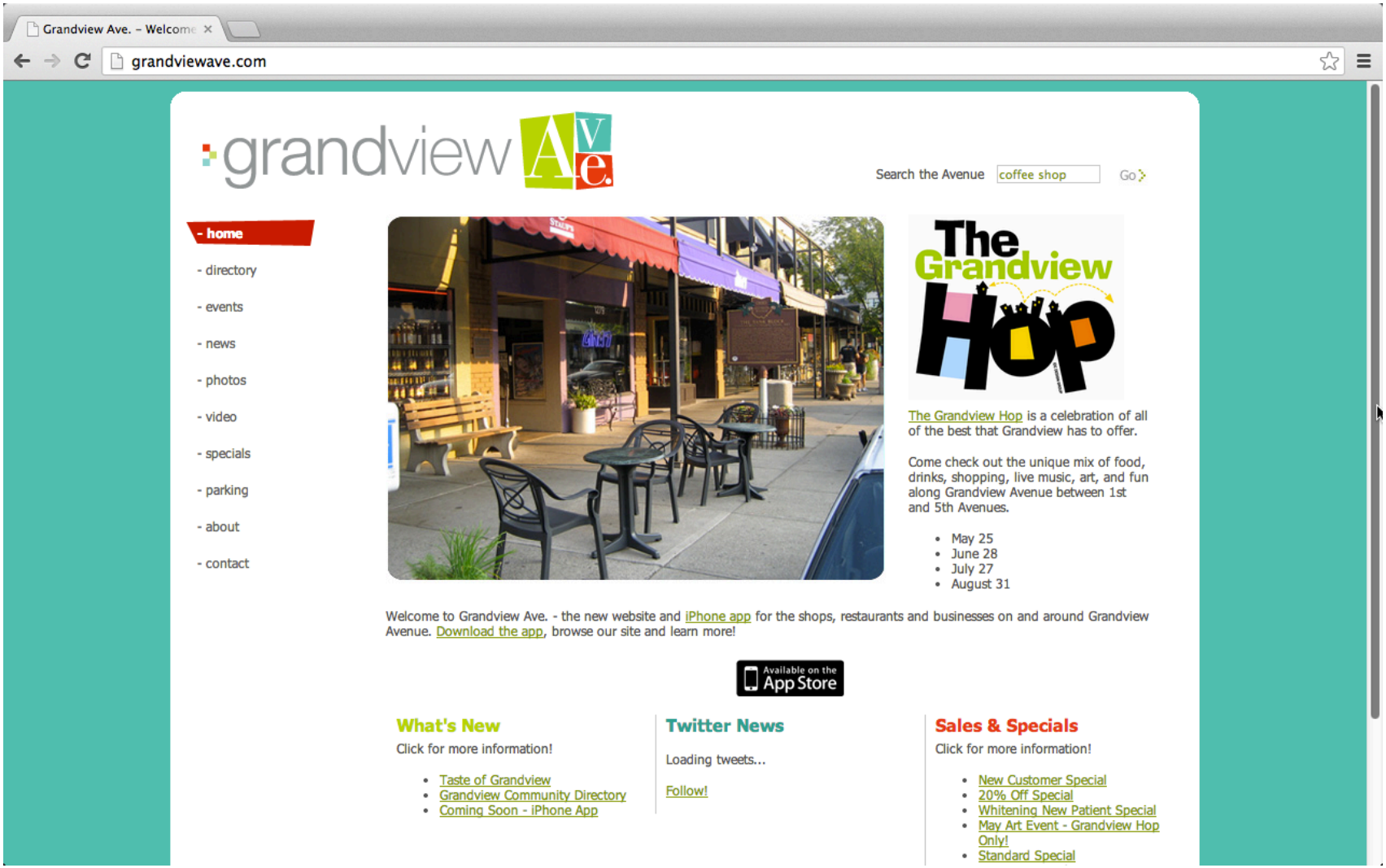
- **Mobile Apps**
  - Web Apps



- Responsive Web Design (RWD)

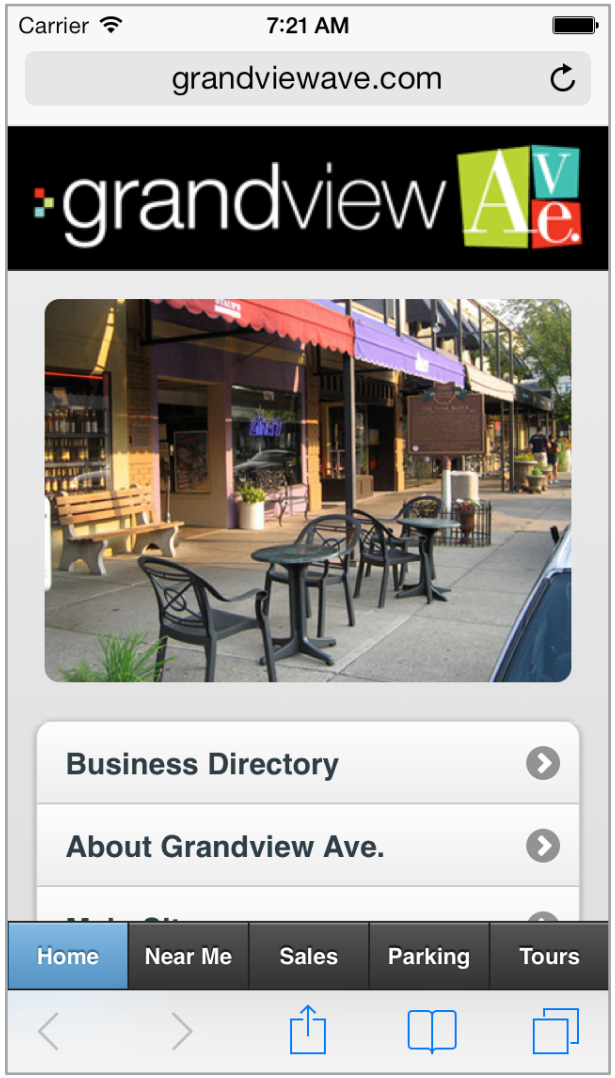
Source: Scott Preston, Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Apress, 2012

Mobile Website
Classic Website



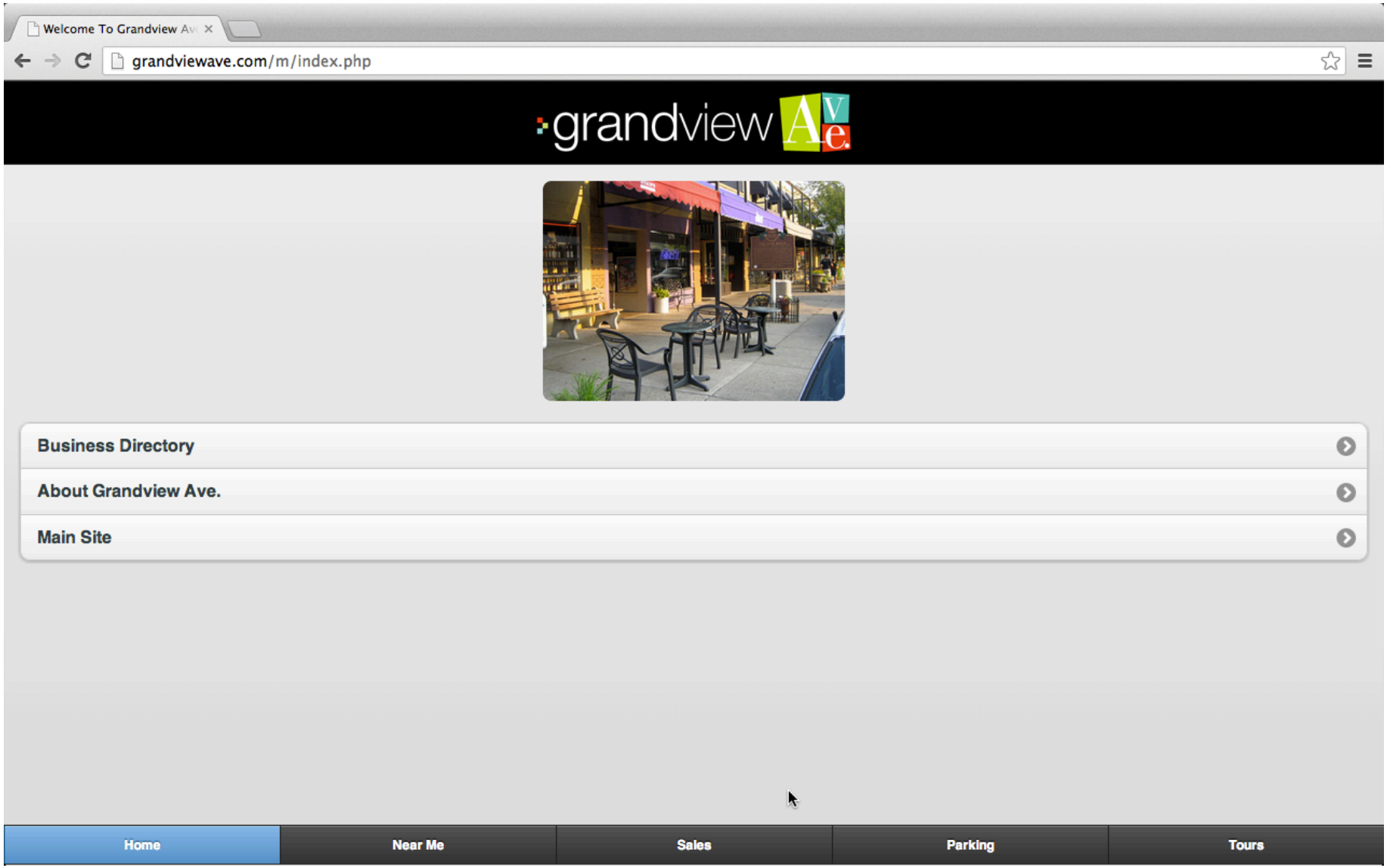
http://grandviewave.com/

Mobile Apps (Web Apps)



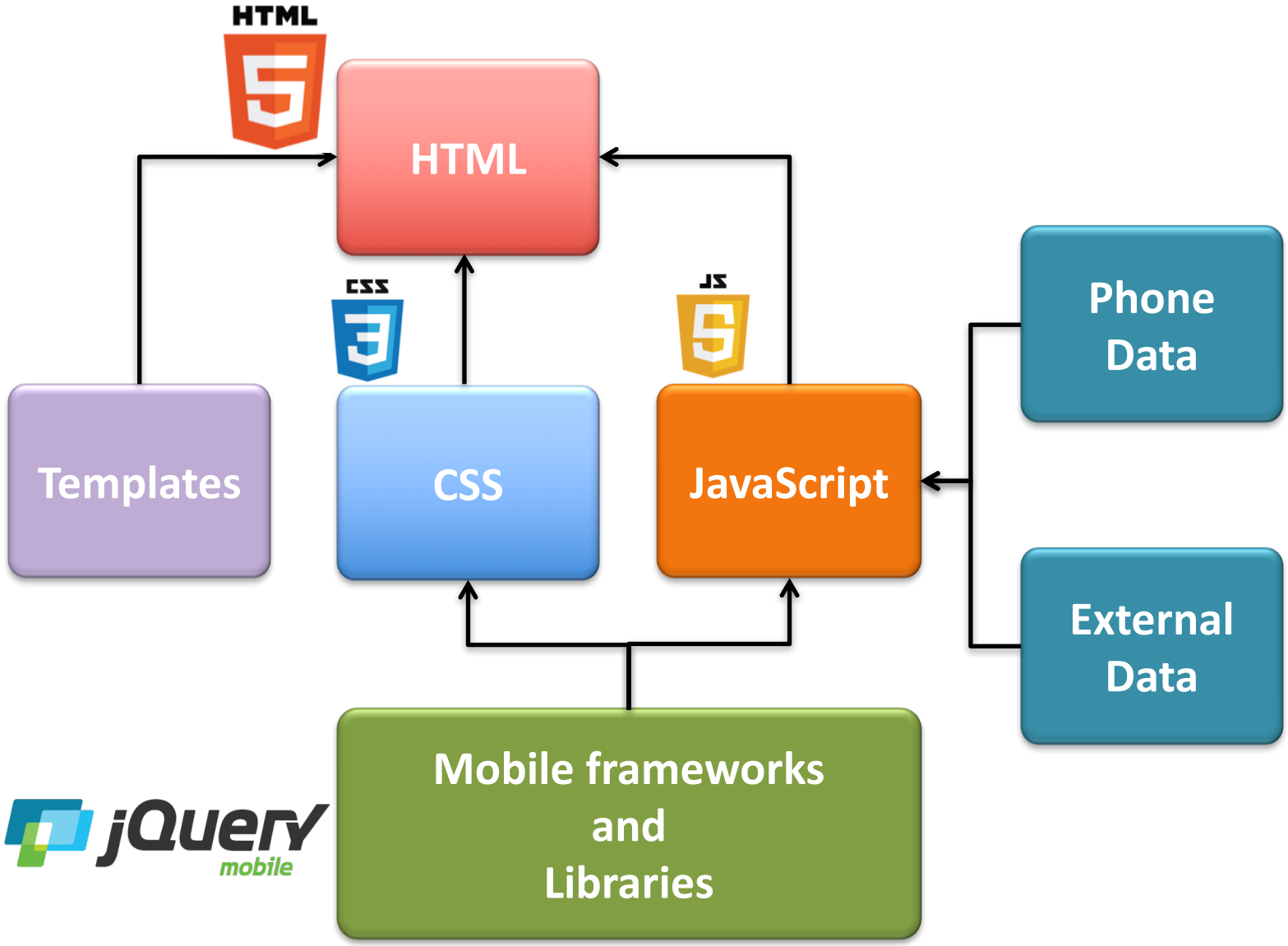
http://grandviewave.com/

Responsive Web Design (RWD)



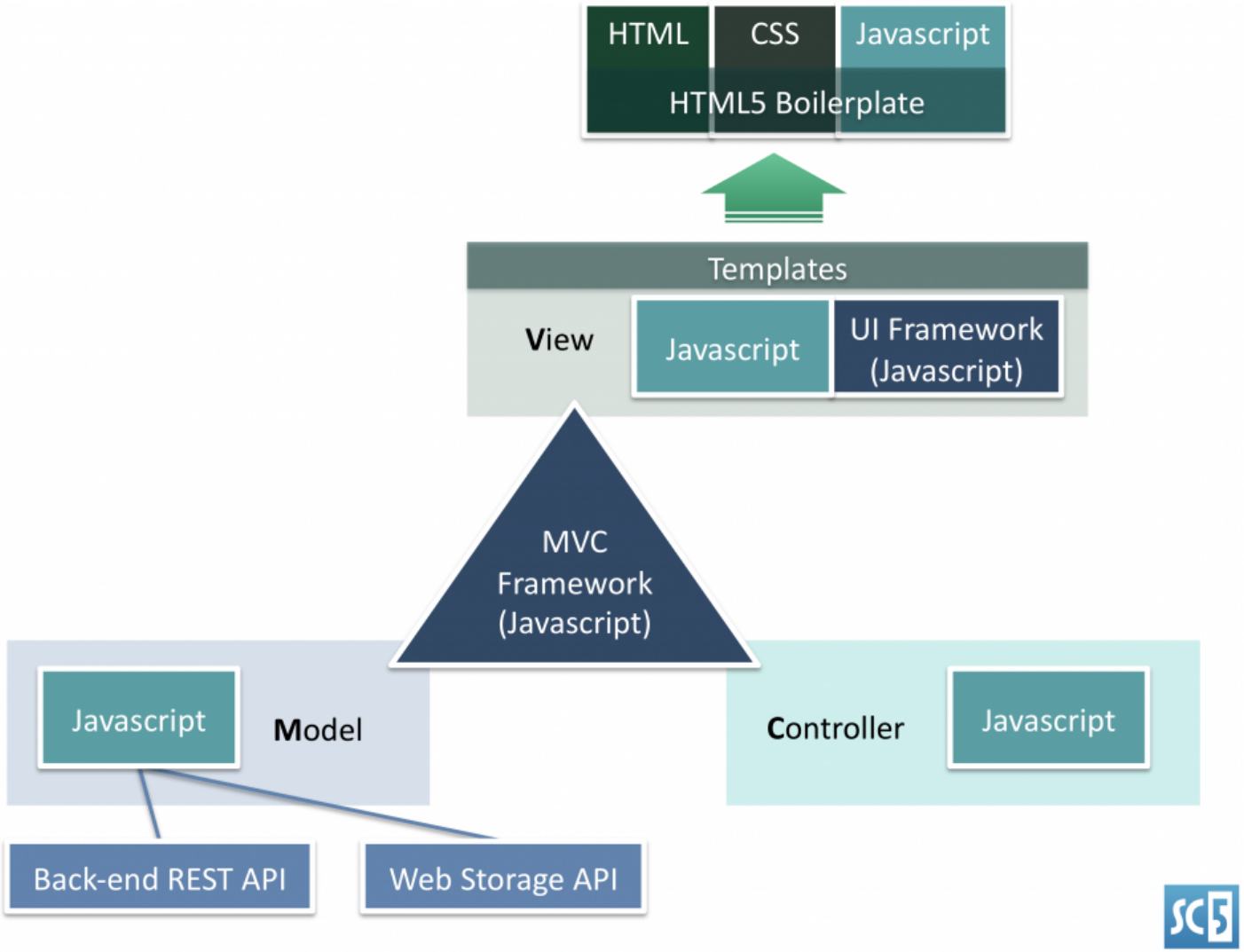
http://grandviewave.com/m/

Mobile Web App



Source: Scott Preston, Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Apress, 2012

MVC Framework of Mobile Apps (HTML5, CSS3, JavaScript)



Source: http://sc5.io/blog/2012/02/anatomy-of-a-html5-app/

jQuery Mobile

Plugins | Contribute | Events | Support | jQuery Foundation

jQuery mobile

Your donations help fund the continued development and growth of **jQuery**.

SUPPORT THE PROJECT

Demos | Download | API Documentation | Themes | Resources | Blog | About

Search

A Touch-Optimized Web Framework

jQuery Mobile is a HTML5-based user interface system designed to make responsive web sites and apps that are accessible on all smartphone, tablet and desktop devices.

Download jQuery Mobile

Custom download

Latest stable

Version 1.4.5

jQuery 1.8 - 1.11 / 2.1

Seriously cross-platform with HTML5

jQuery Mobile framework takes the "write less, do more" mantra to the next level: Instead of writing unique applications for each mobile device or OS, the jQuery mobile framework allows you to design a single highly-branded responsive web site or application that will work on all popular smartphone, tablet, and desktop platforms.

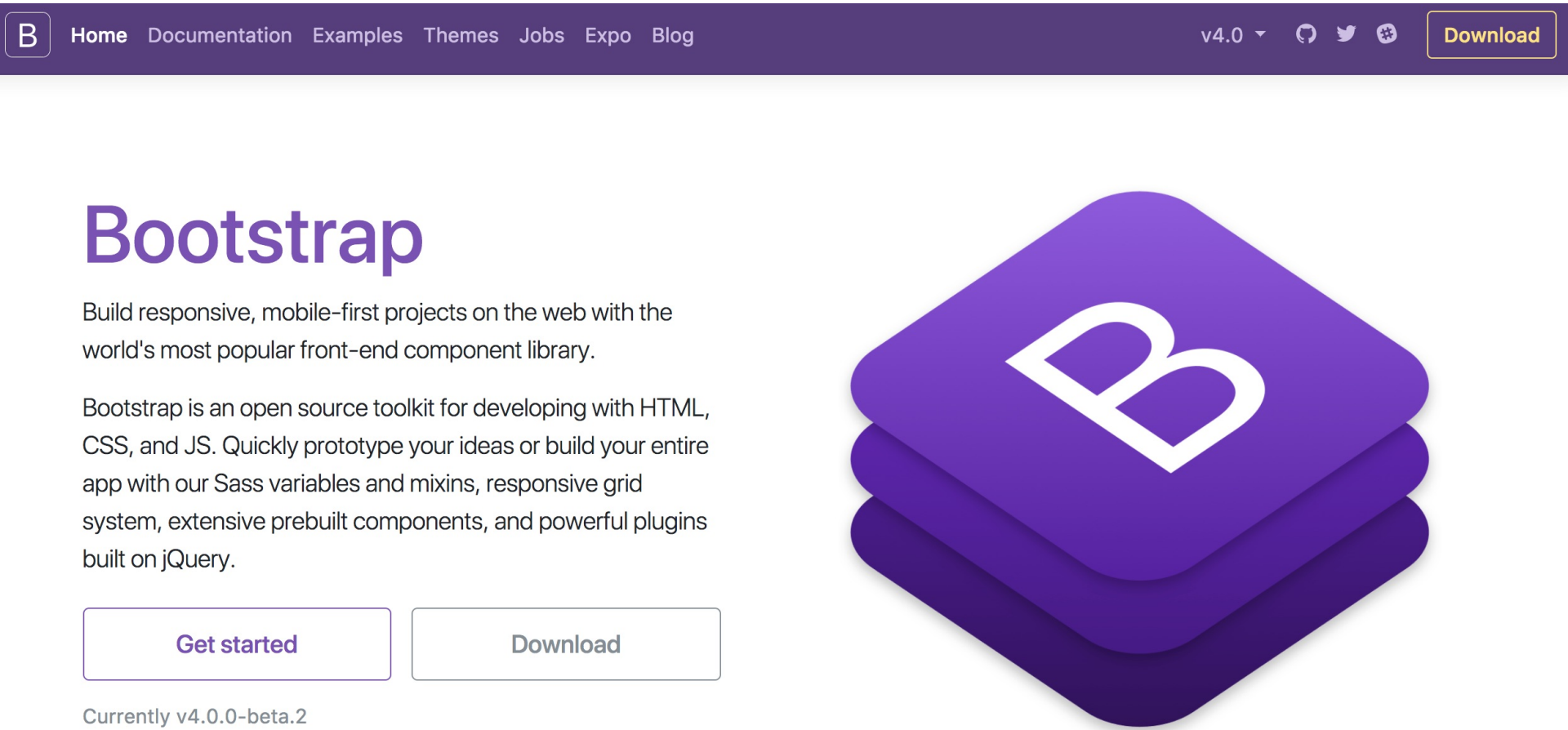
Browser Support

Developer Links

- Source Code (GitHub)
- jQuery Mobile Git (WIP Build)
  - JavaScript
  - CSS
- Report an issue
- Browser Support

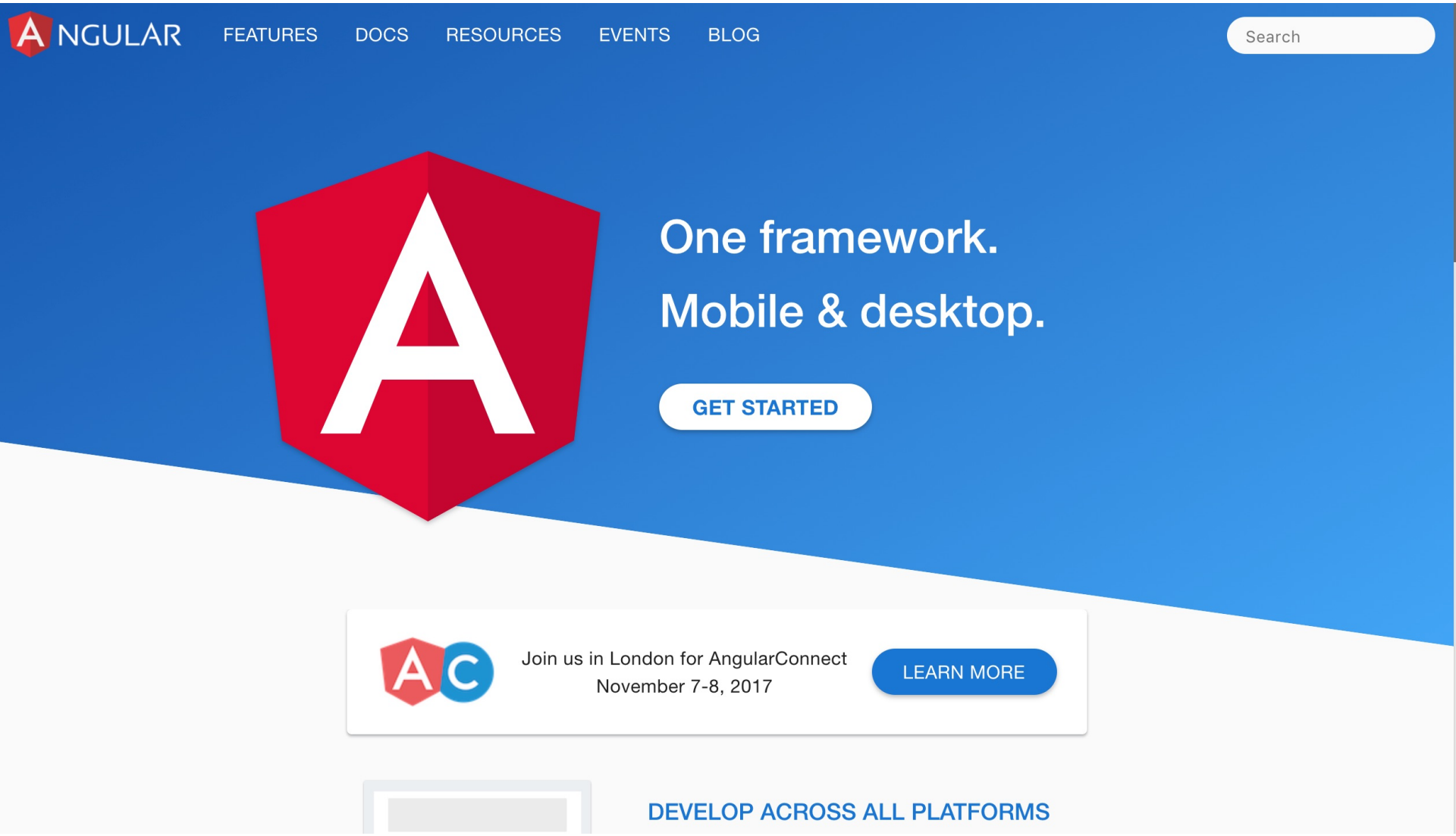
https://jquerymobile.com/

Bootstrap



http://getbootstrap.com/

Angular



https://angular.io/

React js

React Docs Tutorial Community Blog Search docs v16.0.0 GitHub

React

A JavaScript library for building user interfaces

Get Started Take the Tutorial

Declarative

React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the

Component-Based

Build encapsulated components that manage their own state, then compose them to make complex UIs.

Learn Once, Write Anywhere

We don't make assumptions about the rest of your technology stack, so you can develop new features in React without rewriting existing code.

https://reactjs.org/

React Native

React Native 0.49

Docs Community Blog Search docs... GitHub React

React Native

Learn once, write anywhere: Build mobile apps with React

Get Started Learn the Basics

Build native mobile apps using JavaScript and React

React Native lets you build mobile apps using only JavaScript. It uses the same design as React, letting you compose a rich mobile UI from declarative components.

```
import React, { Component } from 'react';
import { Text, View } from 'react-native';

class WhyReactNativeIsSoGreat extends Component {
  render() {
    return (
      <View>
        <Text>
          If you like React on the web, you'll like React Native.
        </Text>
        <Text>
```

https://facebook.github.io/react-native/

Vue.js

Vue.js

Learn Ecosystem Team Support Vue Translations

The Progressive JavaScript Framework

GET STARTED GITHUB

Approachable

Already know HTML, CSS and JavaScript? Read the guide and start building things in no time!

Versatile

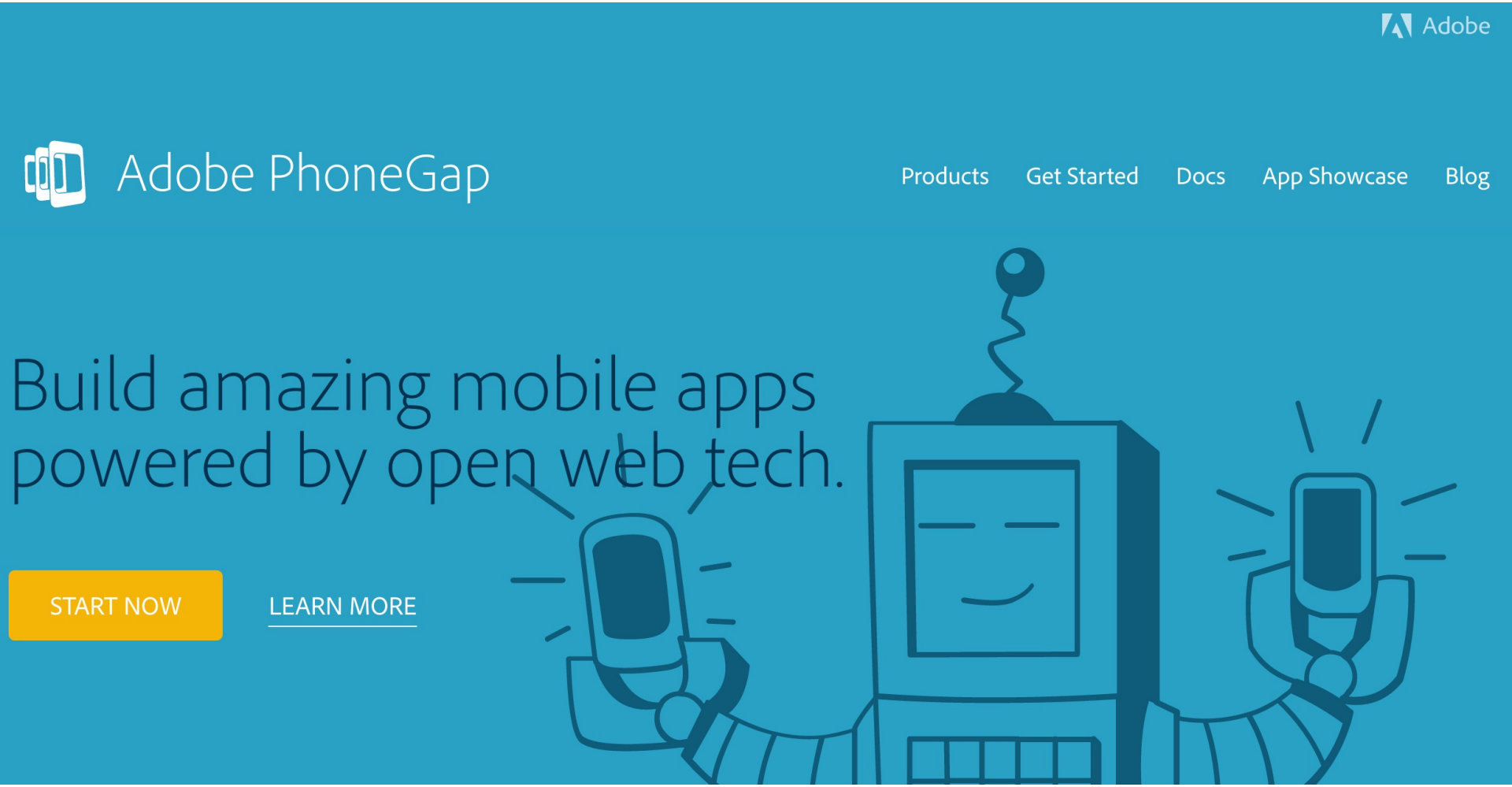
An incrementally adoptable ecosystem that scales between a library and a full-featured framework.

Performant

20KB min+gzip Runtime
Blazing Fast Virtual DOM
Minimal Optimization Efforts

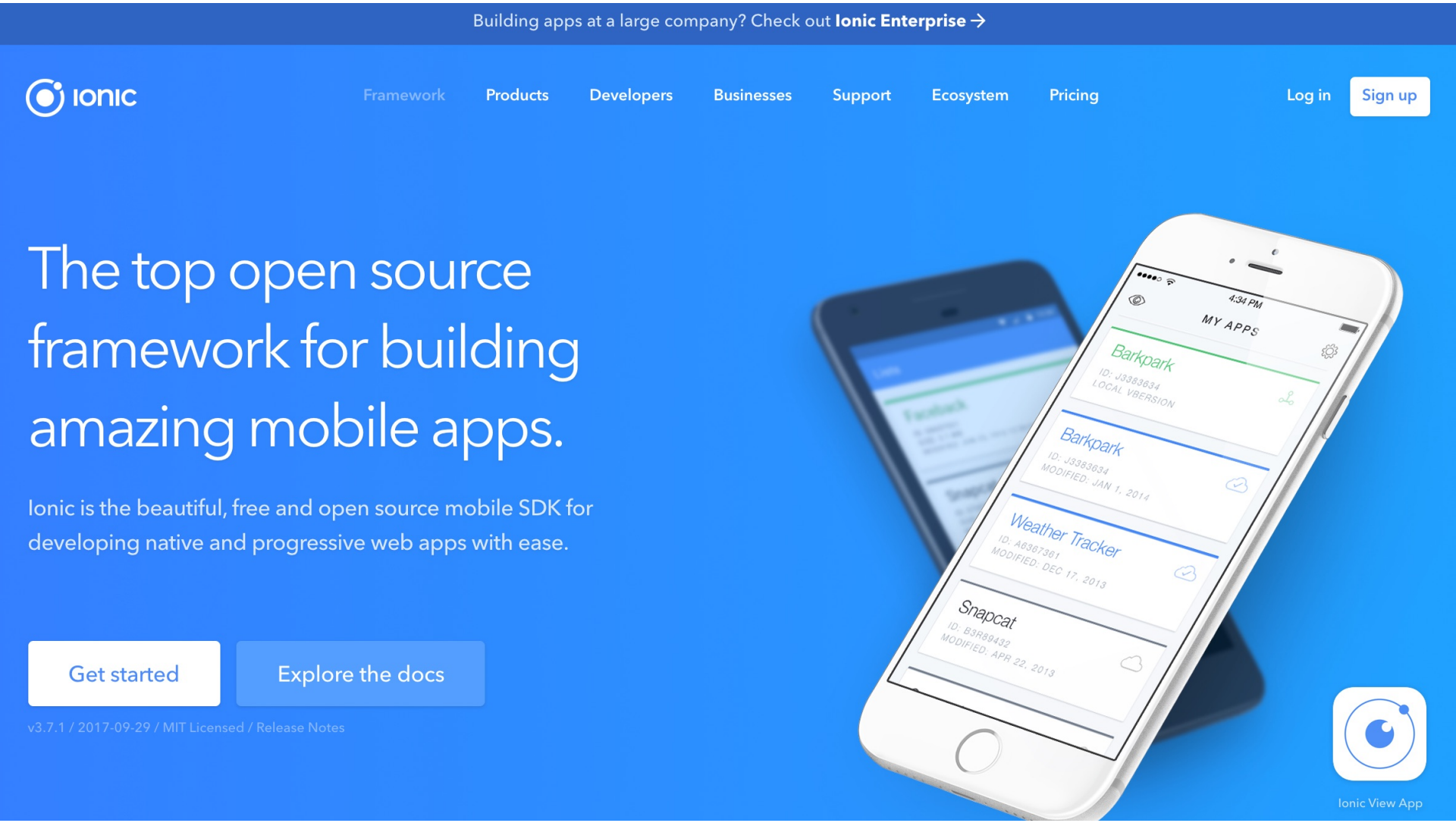
https://vuejs.org/

PhoneGap:
Mobile Apps Powered by Open Web Tech



https://phonegap.com/

Ionic: Framework for Developing Native and Progressive Web Apps



https://ionicframework.com/

Mobile Web App
Organizing files in directories

- Classic Website
  - / - for all HTML files
  - /css - for all CSS
  - /js - for all JavaScript
  - /images - for all images
- Mobile Web App
  - /m -for all HTML files
  - /m/css - for all CSS
  - /m/js - for all JavaScript
  - /m/images - for all images.

Source: Scott Preston, Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Apress, 2012

HTML5

HTML5

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>My Title</title>
  </head>
  <body>
    Hello World
  </body>
</html>
```

HTML5 Game

http://www.cuttherope.ie/

http://www.cuttherope.ie/

Objective-C to JavaScript

Cut the Rope | Behind the

www.cuttherope.ie/dev/

CUT the ROPE BEHIND THE SCENES

Beauty of the Web

Tell your friends! Like 4.2k Tweet 1,758

MEET OM NOM'S DEVELOPER TEAM

Cut The Rope Developer Candy: Behind the Scenes

MENU

Deliver candy to Owlden

58 fps

Internet Explorer

1:34 / 3:59

MORE FREE FUN!

1 DOWNLOAD Internet Explorer 10 (Platform Preview)

2 GET THE Resource Loader (easily create an HTML5 preloader)

3 START BUILDING Windows 8 Apps (in HTML5 + Javascript)

http://www.cuttherope.ie/dev/

Cut the Rope App

Cut the Rope for iPhone, iP

https://itunes.apple.com/app/cut-the-rope/id380293530?mt=8

Store | Mac | iPod | iPhone | iPad | iTunes | Support

iTunes Preview

What's New | What is iTunes | iTunes Charts

Cut the Rope

By Chillingo Ltd

Open iTunes to buy and download apps.

Game Center

View More By This Developer

View In iTunes

$0.99

Category: Games
Updated: Sep 10, 2013
Version: 2.3.1
Size: 26.8 MB
Languages: English, Chinese, Dutch, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish
Seller: Chillingo Ltd
© ZeptoLab
Rated 4+

Description

Cut the rope to feed candy to little monster Om Nom®! 400 million downloads around the world of this phenomenal puzzle game. 375 levels and more to come!

Chillingo Ltd Web Site ▸ Cut the Rope Support ▸ Application License Agreement ▸ ...More

What's New in Version 2.3.1

It's time to update! To ensure all in-app purchases and data are saved, please update Cut the Rope now.

iPhone Screenshots

Source: https://itunes.apple.com/app/cut-the-rope/id380293530?mt=8

HTML Versions

Version	Year
HTML	1991
HTML+	1993
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML 1.0	2000
HTML5	**2014**

Source: http://www.w3schools.com/html/html_intro.asp

The <!DOCTYPE> Declaration

HTML5

```
<!DOCTYPE html>
```

HTML 4.01

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01
Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

XHTML 1.0

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

Source: http://www.w3schools.com/html/html_intro.asp

What is HTML?

- HTML is a language for describing web pages.
  - HTML stands for **H**yper **T**ext **M**arkup **L**anguage
  - HTML is a **markup** language
  - A markup language is a set of markup **tags**
  - The tags **describe** document **content**
  - HTML documents contain HTML **tags** and plain **text**
  - HTML documents are also called **web pages**

```
<!DOCTYPE html>
<html>
     <head>
          <meta charset="UTF-8">
          <title>My Title</title>
     </head>
     <body>
       Hello World
     </body>
</html>
```

Source: http://www.w3schools.com/html/html_intro.asp

HTML Tag, Element, Attribute

HTML Element

```
<title>My Title</title>
```

```
<p>This is a paragraph.</p>
```

```
<tagname>content</tagname>
```

HTML Tag, Element, Attribute

HTML Element

```
<title>My Title</title>
```

Tag
Start Tag
Opening Tag

Tag
End Tag
Closing Tag

HTML Tag, Element, Attribute

Element

```
<meta charset="UTF-8">
```

Tag

Attibute

What is HTML5

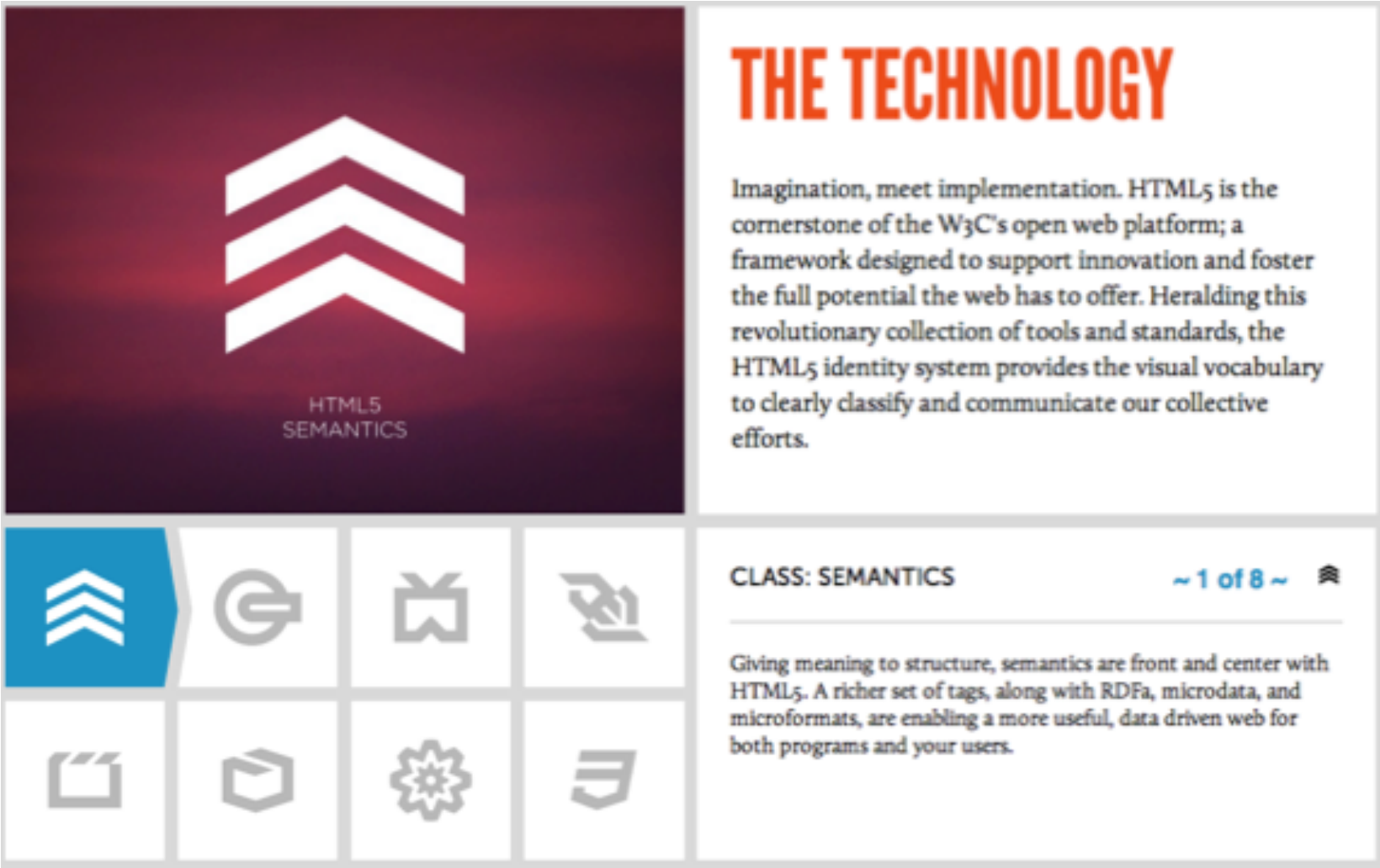
- **HTML5 is The New HTML Standard**
  - What HTML5 is Not
- The new HTML5 structural elements and attributes
- The new HTML5 form input types and attributes

What HTML5 is Not

- It's Not XHTML
  - `<div id=container>This is a div<br></div>`
  - `<div id="container">This is another div<br/></div>`
- It's Not HTML4+1
- HTML5 is Not Just Markup
  - Not just tags
  - It's also a set of JavaScript APIs
    - Provide a richer user experience

Source: Scott Preston, Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Apress, 2012

HTML5 is The New HTML Standard



Source: http://www.w3.org/html/logo/

HTML5 is The New HTML Standard

Source: http://www.w3schools.com/html/html5_intro.asp

HTML5 is The New HTML Standard

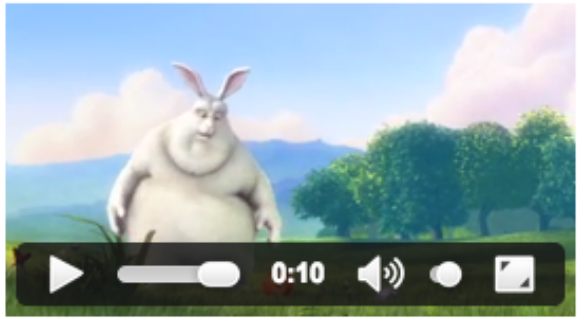
- New Elements
- New Attributes
- Full CSS3 Support
- Video and Audio
- 2D/3D Graphics
- Local Storage
- Local SQL Database
- Web Applications

Source: http://www.w3schools.com/html/html5_intro.asp

HTML5 Multimedia

With HTML5, playing video and audio is easier than ever.

- HTML5 <video>
- HTML5 <audio>



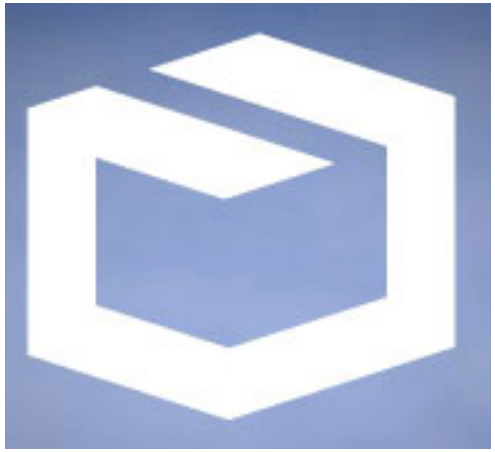

```
<!DOCTYPE HTML>
<html>
<body>

<video width="320" height="240" controls>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
  Your browser does not support the video tag.
</video>

</body>
</html>
```

Source: http://www.w3schools.com/html/html5_intro.asp

HTML5 Graphics

With HTML5, drawing graphics is easier than ever:

- Using the <canvas> element
- Using inline SVG
- Using CSS3 2D/3D



Source: http://www.w3schools.com/html/html5_intro.asp

HTML5 Applications

With HTML5, web application development is easier than ever.

- Local data storage
- Local file access
- Local SQL database
- Application cache
- Javascript workers
- XHTMLHttpRequest 2

Source: http://www.w3schools.com/html/html5_intro.asp

Semantic Elements
HTML5 Forms

- Semantic Elements
  - New elements for headers, footers, menus, sections, and articles.
- HTML5 Forms
  - New form elements,
  - new attributes,
  - new input types,
  - automatic validation.

Source: http://www.w3schools.com/html/html5_intro.asp

HTML5 uses CSS3

- New Selectors
- New Properties
- Animations
- 2D/3D Transformations
- Rounded Corners
- Shadow Effects
- Downloadable Fonts

Source: http://www.w3schools.com/html/html5_intro.asp

HTML5

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <title>My Title</title>
  </head>
  <body>
    Hello World
  </body>
</html>
```

CSS3

Cascading Style Sheets (CSS)

- a simple mechanism for adding style (e.g., fonts, colors, spacing) to Web documents.

```
<style>
  body {background-color:yellow;}
  h1 {color:green}
  p {color:red;}
  div {color:blue; font-size:18px;}
</style>
```

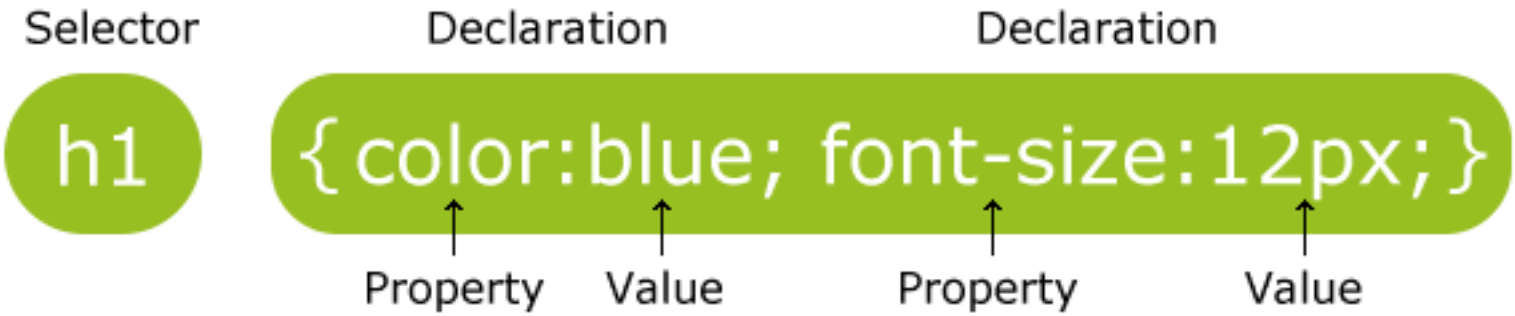
Source: http://www.w3.org/Style/CSS/

CSS3

- CSS3 is the latest standard for CSS.
- CSS3 is completely backwards-compatible with earlier versions of CSS.

Source: http://www.w3schools.com/css/css3_intro.asp

CSS



http://www.w3schools.com/css/css_syntax.asp

CSS

```
<link rel="stylesheet"
type="text/css"
href="mystyle1.css">
```

CSS

```
<style>
   body {background-color:yellow;}
   h1 {color:green}
   p {color:red;}
   div {color:blue; font-size:18px;}
 </style>
```

JavaScript

JavaScript

- JavaScript is a Scripting Language
  - A scripting language is a lightweight programming language.
  - JavaScript is programming code that can be inserted into HTML pages.
  - JavaScript code can be executed by all modern web browsers.
  - JavaScript is easy to learn.

```
<script language="javascript">
  function sayHello()
  {
    var strNameInput = document.getElementById('txtNameInput').value;
    var strOutput = "Hello, my friend, " + strNameInput;
    document.getElementById('divOutput').innerHTML = strOutput;
  }
</script>
```

Source: http://www.w3schools.com/js/js_intro.asp

w3schools.com JavaScript Tutorial

Secure | https://www.w3schools.com/js/js_intro.asp

w3schools.com THE WORLD'S LARGEST WEB DEVELOPER SITE

HTML CSS JAVASCRIPT SQL PHP BOOTSTRAP JQUERY MORE REFERENCES EXAMPLES

JS Tutorial

- JS HOME
- JS Introduction
- JS Where To
- JS Output
- JS Syntax
- JS Statements
- JS Comments
- JS Variables
- JS Operators
- JS Arithmetic
- JS Assignment
- JS Data Types
- JS Functions
- JS Objects
- JS Scope
- JS Events
- JS Strings
- JS String Methods
- JS Numbers
- JS Number Methods
- JS Math
- JS Random
- JS Dates

JavaScript Introduction

‹ Previous Next ›

This page contains some examples of what JavaScript can do.

JavaScript Can Change HTML Content

One of many JavaScript HTML methods is **getElementById()**.

This example uses the method to "find" an HTML element (with id="demo") and changes the element content (**innerHTML**) to "Hello JavaScript":

Example

```
document.getElementById("demo").innerHTML = "Hello JavaScript";
```

https://www.w3schools.com/js/js_intro.asp

JavaScript: Writing Into HTML Output

```
document.write("<h1>This is a
heading</h1>");
document.write("<p>This is a
paragraph</p>");
```

JavaScript: Reacting to Events

```
<button type="button"
onclick="alert('Welcome!')">
Click Me!</button>
```

JavaScript: Changing HTML Content

```
x=document.getElementById("demo");
x.innerHTML="Hello JavaScript”;
```

Hello JavaScript

```
<!DOCTYPE html>
<html>
<body>

<h2>Hello JavaScript Demo</h2>
<p id="demo">HTML content</p>

<button type="button"
onclick="document.getElementById('demo').innerHTML =
'Hello JavaScript'">Click Me</button>

</body>
</html>
```

Source: http://www.w3schools.com/js/js_intro.asp

Hello if else

```
<!DOCTYPE html>
<html>
<body>
<p>JavaScript if else</p>
<button onclick="myFunction()">Try it</button>
<p id="demo"></p>
<script>
function myFunction() {
    var greeting;
    var time = new Date().getHours();
    if (time < 10) {
        greeting = "Good morning";
    } else if (time < 20) {
        greeting = "Good day";
    } else {
        greeting = "Good evening";
    }
document.getElementById("demo").innerHTML = greeting;
}
</script>
</body>
</html>
```

Source: https://www.w3schools.com/js/tryit.asp?filename=tryjs_elseif

HTML5 Editors

Maqetta: Online HTML5 WYSIWYG Editor

Maqetta

maqetta.org

Maqetta is an open source project hosted by the Dojo Foundation

Maqetta

search Maqetta... Search

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Visual authoring of HTML5 user interfaces - in the browser!

Maqetta is an open source project that provides WYSIWYG visual authoring of HTML5 user interfaces. The Maqetta application itself is authored in HTML, and therefore runs in the browser without requiring additional plugins or downloads.

LAUNCH MAQETTA

News

Maqetta Release 10 is now available!

Quick Links

- Project Summary
- Help and Support
- Community
- Issue Tracking
- Open Source

http://maqetta.org/

Aloha Editor: HTML5 WYSIWYG editor

Aloha Editor – HTML5 WYS

www.aloha-editor.org

Aloha Editor

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Fork me on GitHub

You can contribute as translator, designer, blogger, community angel, cook, Javascript lover.

Aloha Editor makes CONTENT in your browser EDITABLE

Aloha Editor - HTML5 WYSIWYG Editor

The world's most **advanced** browser HTML5 based WYSIWYG editor lets you experience a whole new way of editing. It's faster than existing technologies and offers unprecedented WYSIWYG functionalities.

Like 1,150 people like this. Be the first of your friends.

Download Aloha Editor
Version 0.23.20

Available in en, fr, de more GPLv2 License

CDN · 5 Minute Setup Guide
cdn.aloha-editor.org

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Aloha Editor is available for:

GENTICS CONTENT.NODE WordPress Drupal™ TYPO3

ektron Create Meteor JS

jQuery Europe 2014
28th of February / 1st of March 2014
Palais Liechtenstein, Vienna

http://www.aloha-editor.org/

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Overview Features Tech specs Reviews FAQ Showcase Membership plans

The new standard in web standards.

New features, instant access to new updates, and more efficient tools let you work faster and code smarter.

Watch the video ›

Develop more web content, more quickly. A streamlined user interface, connected tools, and new visual CSS editing tools let you code efficiently and intuitively. And now, Dreamweaver® CC lets you share work directly from within the application, and helps you keep up with web standards by giving you access to new features as soon as they're available. Your entire creative world, together in one place. Only in

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Creative Cloud
Everything you need to create anything.

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Existing CS customers: Save 40%. Last chance — Dec. 3

Adobe Dreamweaver CC
Build sites and apps using a modern, all-in-one web design tool.

Annual plan for US $19.99 per month

Join

Try

Student and teacher pricing ›

http://www.adobe.com/products/dreamweaver.html

BlueGriffon: WYSIWYG content editor

BlueGriffon, The next-gen

www.bluegriffon.org

BlueGriffon™

The next-generation Web Editor
based on the rendering engine of Firefox

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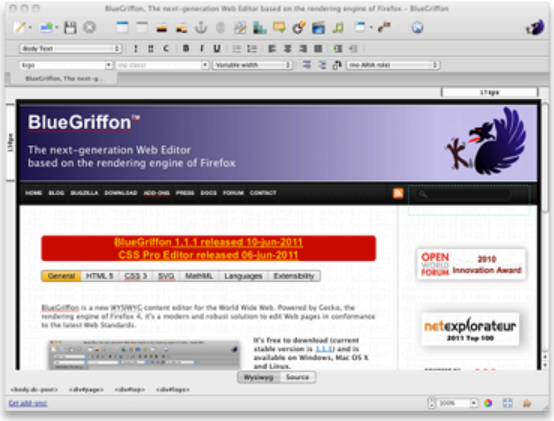
BlueGriffon 1.7.2 released 19-jun-2013

General | HTML 5 | CSS 3 | SVG | MathML | Languages | Extensibility

BlueGriffon is a new WYSIWYG content editor for the World Wide Web. Powered by Gecko, the rendering engine of Firefox, it's a modern and robust solution to edit Web pages in conformance to the latest Web Standards.



It's free to download (current stable version is 1.7.2) and is available on Windows, Mac OS X and Linux.

BlueGriffon is available in English, Dutch, Finnish, French, Czech, German, Hebrew, Hungarian, Italian, Japanese, Korean, Polish, Simplified Chinese, Serbian, Slovenian, Spanish, Swedish and Traditional Chinese

BlueGriffon is an intuitive application that provides Web authors (beginners or more advanced) with a simple User Interface allowing to create attractive Web sites without requiring extensive technical knowledge about Web Standards.

http://www.bluegriffon.org/

Online Editor: http://jsbin.com

JS Bin – Collaborative JavaS

jsbin.com

Bins | Add library | HTML | CSS | JavaScript | Console | Output | Log in | Register | Help

HTML

```
<!DOCTYPE html>
<html>
<head>
<meta charset=utf-8 />
<title>JS Bin</title>
</head>
<body>

</body>
</html>
```

Output | Run with JS | Auto-run JS

http://jsbin.com/

Aptana Studio 3

www.aptana.com/products/studio3/download.html

Download Aptana Studio 3.6.1

Aptana Studio 3.6.1 is our code base and complete environment that includes extensive capabilities to build Ruby and Rails, PHP, and Python applications, along with complete HTML, CSS and JavaScript editing.

You are about to download:

Aptana Studio 3.6.1
Mac OS X, Intel

Standalone Version Eclipse Plug-in Version

System Requirements
Mac OS X 10.5 or better, Java 1.6

Getting Started Guide

Release Notes

Looking for a different OS, download format, or architecture?

Customize Your Download

Please provide us your name and email address so that we can get a better sense for who uses our product. We may use this email to occasionally communicate product and company news.

Email Address

DOWNLOAD
APTANA STUDIO 3

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PRODUCTS

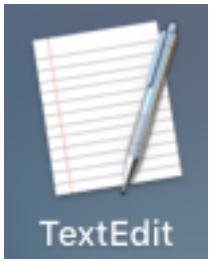
Studio 2

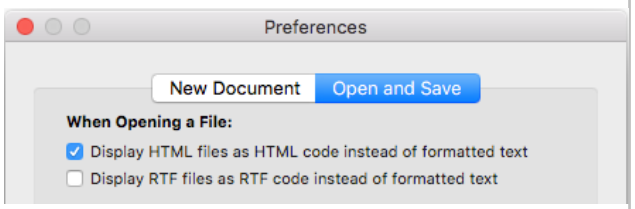
Studio 3

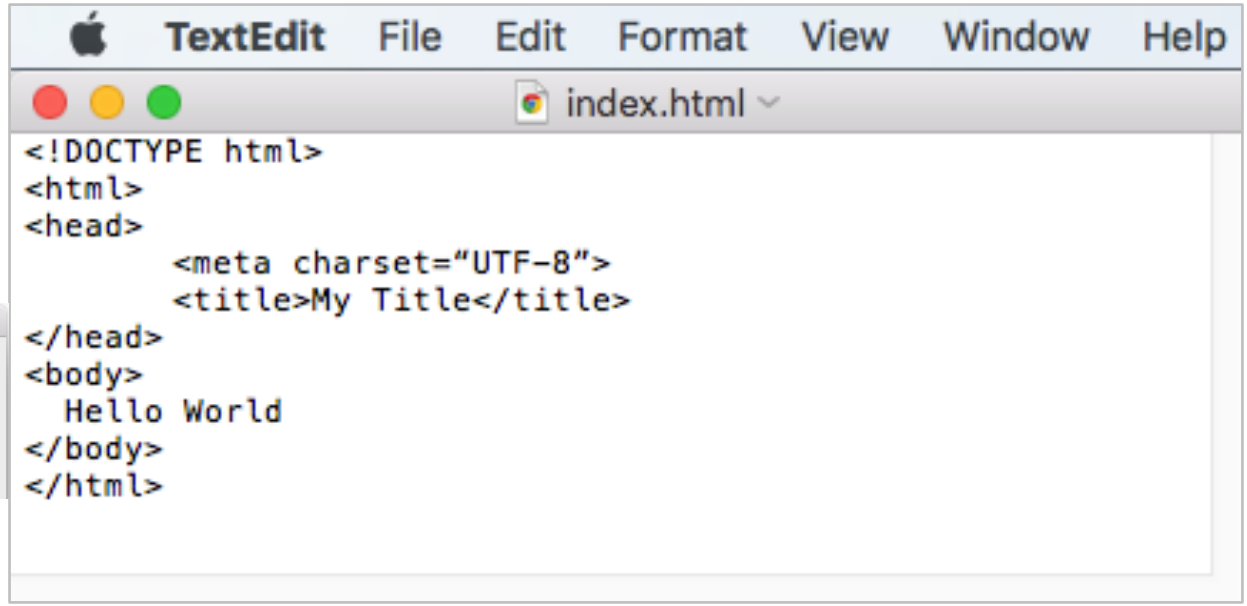
RadRails 2

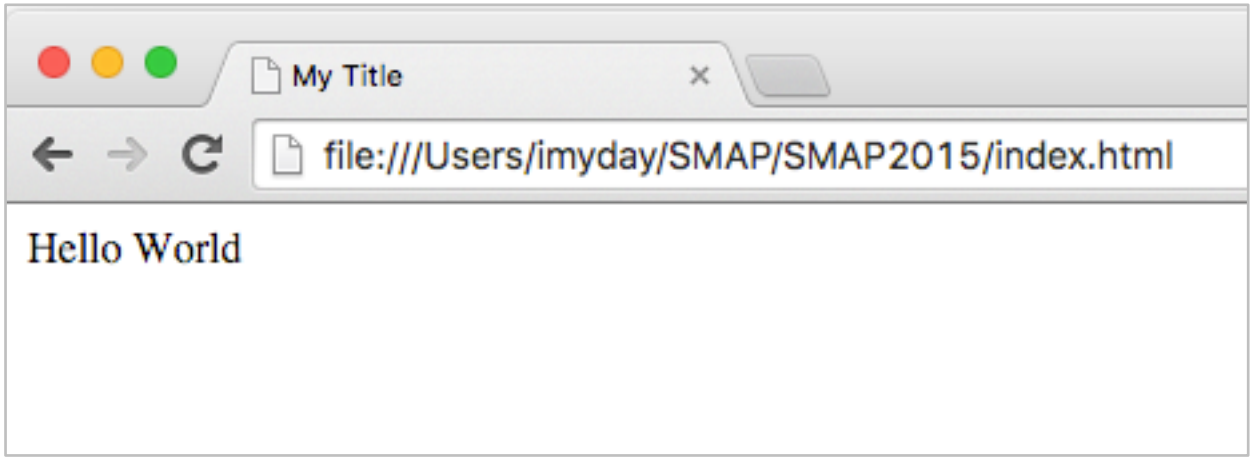
http://www.aptana.com/products/studio3/download.html

TextEdit in Mac OSX









Sublime Text

Sublime Text: The text edi

www.sublimetext.com

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Sublime Text

Sublime Text is a sophisticated text editor for code, markup and prose.
You'll love the slick user interface, extraordinary features and amazing performance.

Demonstration

base64.cc

```
31  void base64_encode(const uint8_t * data, size_t length, char * dst)
32  {
33      size_t src_idx = 0;
34      size_t dst_idx = 0;
35      for (; (src_idx + 2) < length; src_idx += 3, dst_idx += 4)
36      {
37          uint8_t s0 = data[src_idx];
38          uint8_t s1 = data[src_idx + 1];
39          uint8_t s2 = data[src_idx + 2];
40
41          dst[dst_idx + 0] = charset[(s0 & 0xfc) >> 2];
42          dst[dst_idx + 1] = charset[((s0 & 0x03) << 4) | ((s1 & 0xf0) >> 4)];
43          dst[dst_idx + 2] = charset[((s1 & 0x0f) << 2) | (s2 & 0xc0) >> 6];
44          dst[dst_idx + 3] = charset[(s2 & 0x3f)];
45      }
46
47      if (src_idx < length)
48      {
49          uint8_t s0 = data[src_idx];
50          uint8_t s1 = (src_idx + 1 < length) ? data[src_idx + 1] : 0;
51
52          dst[dst_idx++] = charset[(s0 & 0xfc) >> 2];
53          dst[dst_idx++] = charset[((s0 & 0x03) << 4) | ((s1 & 0xf0) >> 4)];
54          if (src_idx + 1 < length)
55              dst[dst_idx++] = charset[((s1 & 0x0f) << 2)];
56      }
```

Line 31, Column 55 Spaces: 4 C++

Use Multiple Selections to rename variables quickly.
Here, ⌘D is used to select the next occurrence of the current word

◀ 1 / 6 ▶

http://www.sublimetext.com/

Notepad++

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Current Version: 6.5

News

Notepad++ 6.5 released
Sep 29 2013

v6.4.5 - Regression fix
Aug 09 2013

Notepad++ 6.4.4 released
Aug 08 2013

Notepad++ 6.4.3 released
Jul 28 2013

Notepad++ 6.4.2 released
Jul 08 2013

Notepad++ 6.4.1 released
Jun 30 2013

Notepad++ 6.4 released
Jun 29 2013

Notepad++ 6.3.3 released
May 05 2013

Notepad++ 6.3.2 released
Apr 02 2013

Notepad++ 6.3.1 released
Mar 17 2013

more news »

About

Notepad++ is a free (as in "free speech" and also as in "free beer") source code editor and Notepad replacement that supports several languages. Running in the MS Windows environment, its use is governed by GPL License.

Based on the powerful editing component Scintilla, Notepad++ is written in C++ and uses pure Win32 API and STL which ensures a higher execution speed and smaller program size. By optimizing as many routines as possible without losing user friendliness, Notepad++ is trying to reduce the world carbon dioxide emissions. When using less CPU power, the PC can throttle down and reduce power consumption, resulting in a greener environment.

*D:\source\notepad4ever.cpp - Notepad++

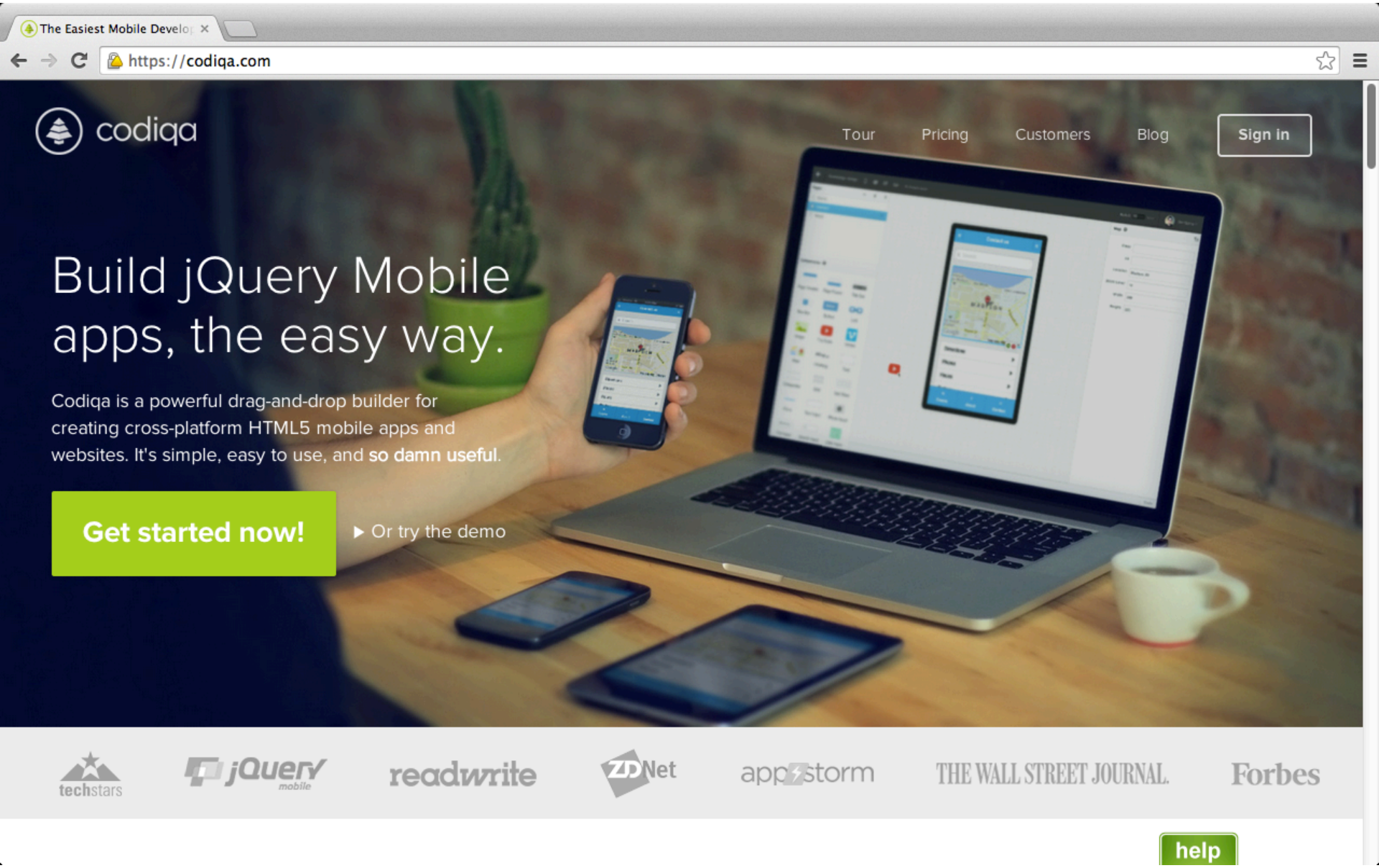
Notepad_plus.cpp | notepad4ever.cpp

```
1  #include <GPL.h>
2  #include <free_software.h>
3
4  void notepad4ever()
5  {
6      while (true)
7      {
8          Notepad++;
9      }
10 }
11
```

You're encouraged to translate Notepad++ into your native language if there's not already a

http://notepad-plus-plus.org/

codiqa: drag-and-drop builder for mobile apps



https://codiqa.com/

codiqa demo

Codiqa Prototypes

https://codiqa.com/demo

DEMO MODE

BUILD TEST Sign up

Pages

- Home
- Examples
- Platforms

Components

Page Header, Page Footer, Tab Bar, Nav Bar, Button, Link, Panel, Image, YouTube, Vimeo, Map, Heading, Divider, Text, HTML

Codiqa

codiqa

Welcome to Codiqa!

Try dragging some elements from the left over here.

You can also add pages, and link buttons to them, like below!

This is just a simple demo, upgrade to the full version to get a lot more!

Home | Components | Platforms

Page

Class

Title: Home

Theme Swatch: Swatch C

Background Image: Choose image...

Background Image Repeat: No repeat

Content Padding: 15 px %

Id: page1 Save

Code

https://codiqa.com/demo

HTML5 Mobile Apps Simulators

Ripple Emulator

Chrome Web Store – Ripple

https://chrome.google.com/webstore/detail/ripple-emulator-beta/geelfhphabnejjhdalkjhgipohgpdnoc?hl=en

chrome web store

imyday@gmail.com

Search the store

Home
Popular
Recommend
Collections
Business Tools
Education
Entertainment
Games
Lifestyle
News & Weath
Productivity
Social & Comm
Utilities
Extensions
Themes

Ripple Emulator (Beta)

★★★★☆ (289) | Developer Tools | from ripple.tinyhippos.com | 104,477 users

+ FREE

OVERVIEW | DETAILS | REVIEWS | RELATED

+1 677

HTML5 Mobile Apps: PhoneGap GeoLocation

0:00 / 1:46

A browser based html5 mobile application development and testing tool

Welcome to Ripple, The Mobile Environment Emulator!

Ripple is a multi-platform mobile environment emulator that is custom-tailored to mobile HTML5 application development and testing. Ripple aims to reduce the challenges being faced by mobile developers caused by today's platform fragmentation in the marketplace.

Ripple is targeted towards WebWorks, PhoneGap, and mobile web development and testing!

Ripple offers the ability to look under the hood of your mobile application, giving you full visibility into what it is doing. It also allows for the use of existing tools to perform JavaScript debugging, HTML DOM inspection, automated testing, as well as multiple device and screen resolution

https://chrome.google.com/webstore/detail/ripple-emulator-beta/geelfhphabnejjhdalkjhgipohgpdnoc?hl=en

Online browser simulator: ipadpeek.com

http://ipadpeek.com/

Opera Mobile Emulator

Opera Mobile Classic Emul

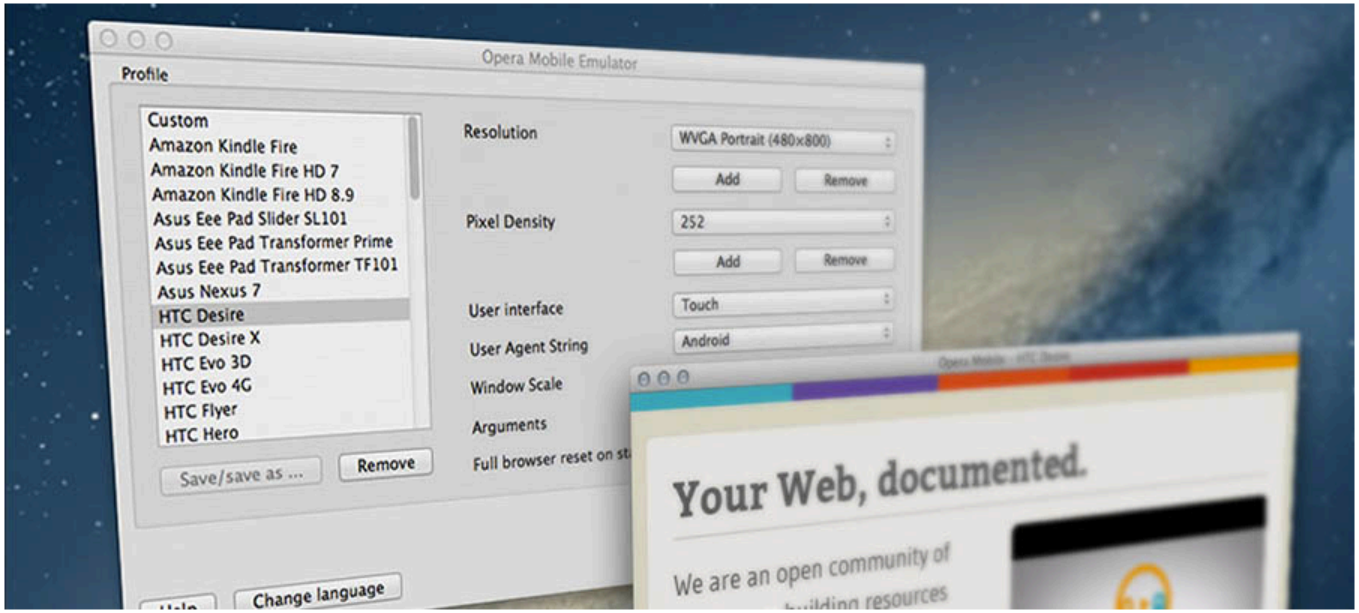
www.opera.com/developer/mobile-emulator

Opera Mediaworks | Operator solutions | TV & OEMs

Opera | Computer | Mobile | Tablet

Opera Mobile Classic Emulator | Opera Mini Simulator

Opera Mobile Classic Emulator

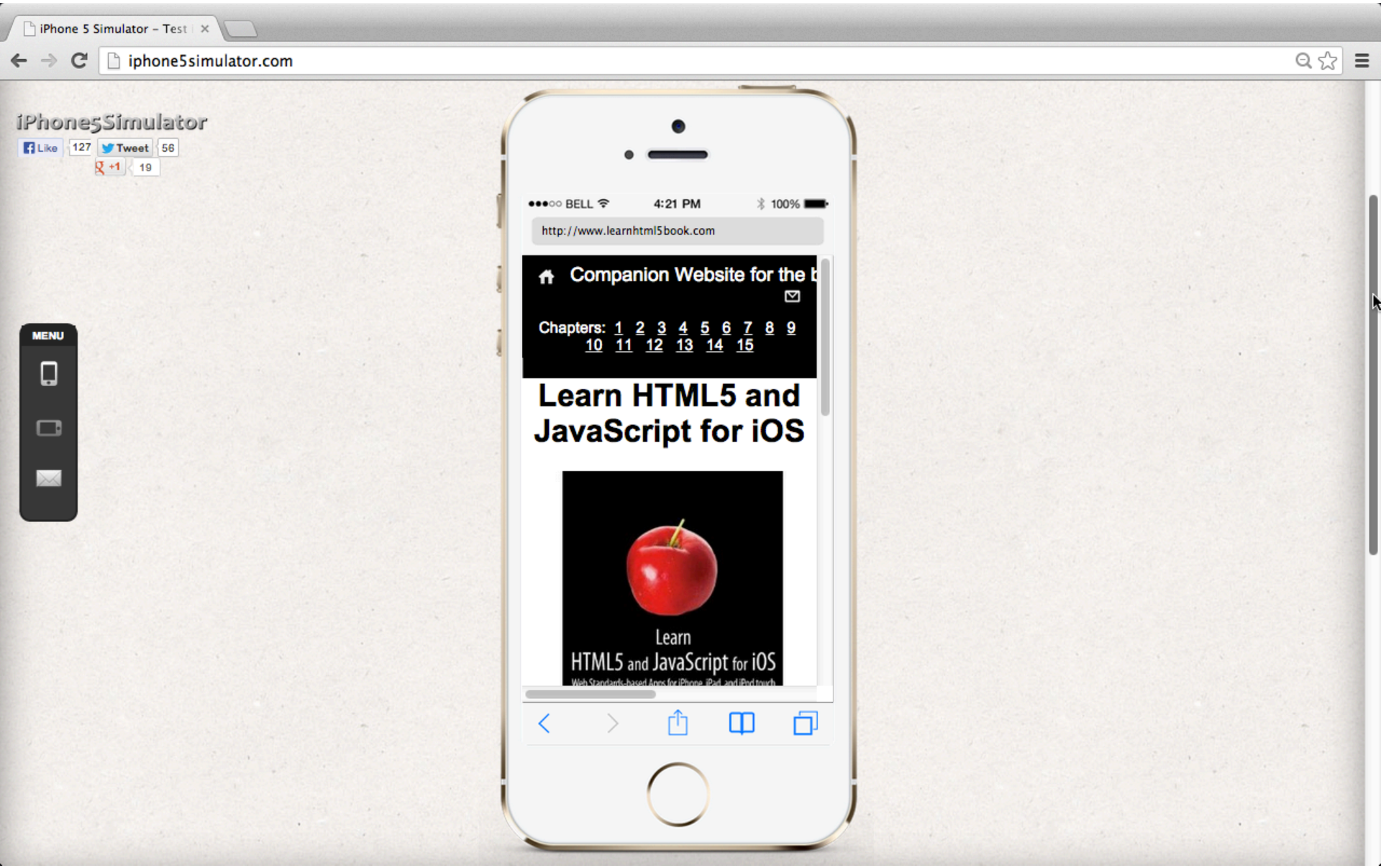


Do your mobile development straight from your desktop, and pair it with Opera Dragonfly for advanced debugging.

Opera Mobile Classic Emulator 12.1 for Windows
Opera Mobile Classic Emulator 12.1 for Mac

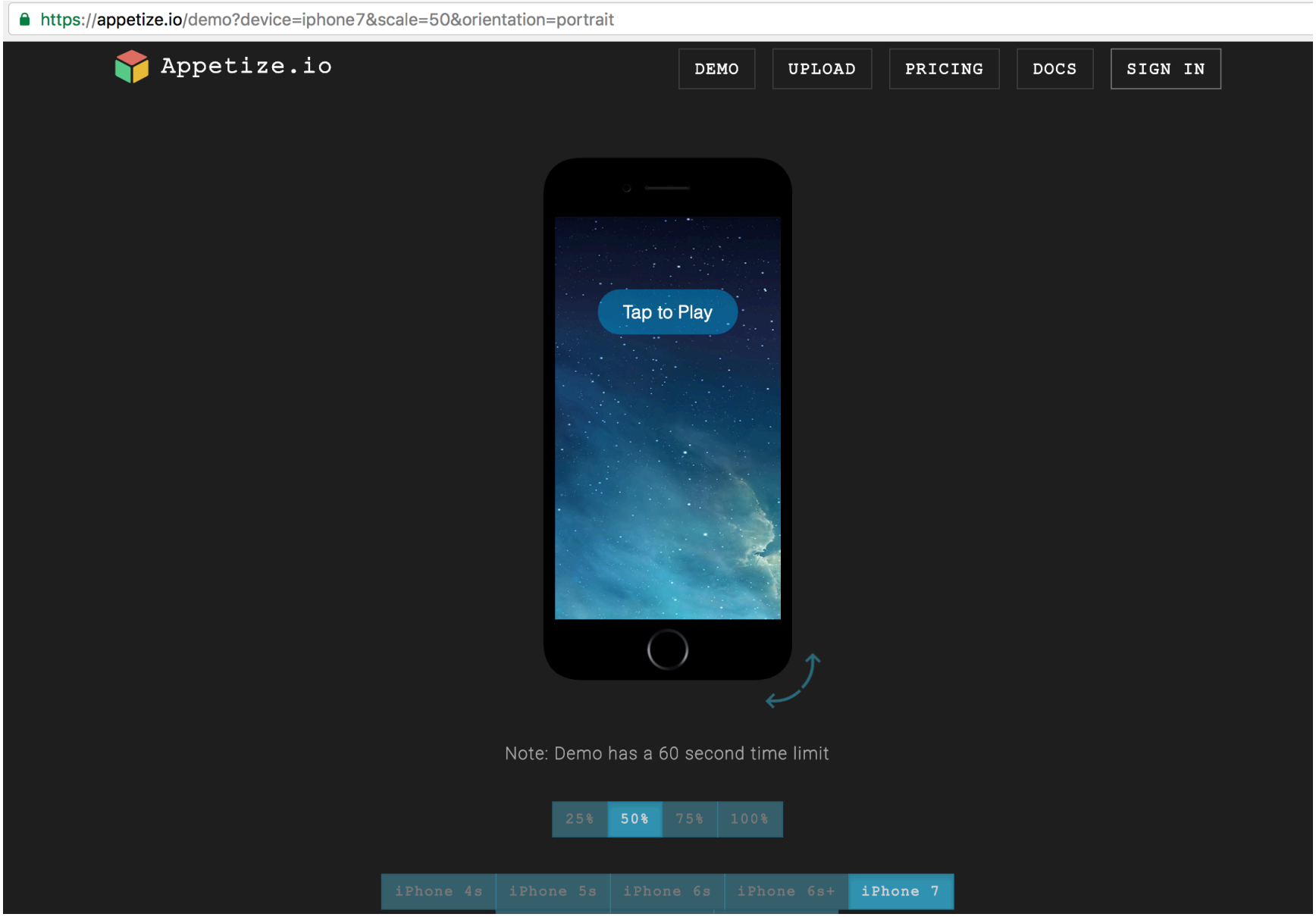
http://www.opera.com/developer/mobile-emulator

iPhone5Simulator



http://iphone5simulator.com/

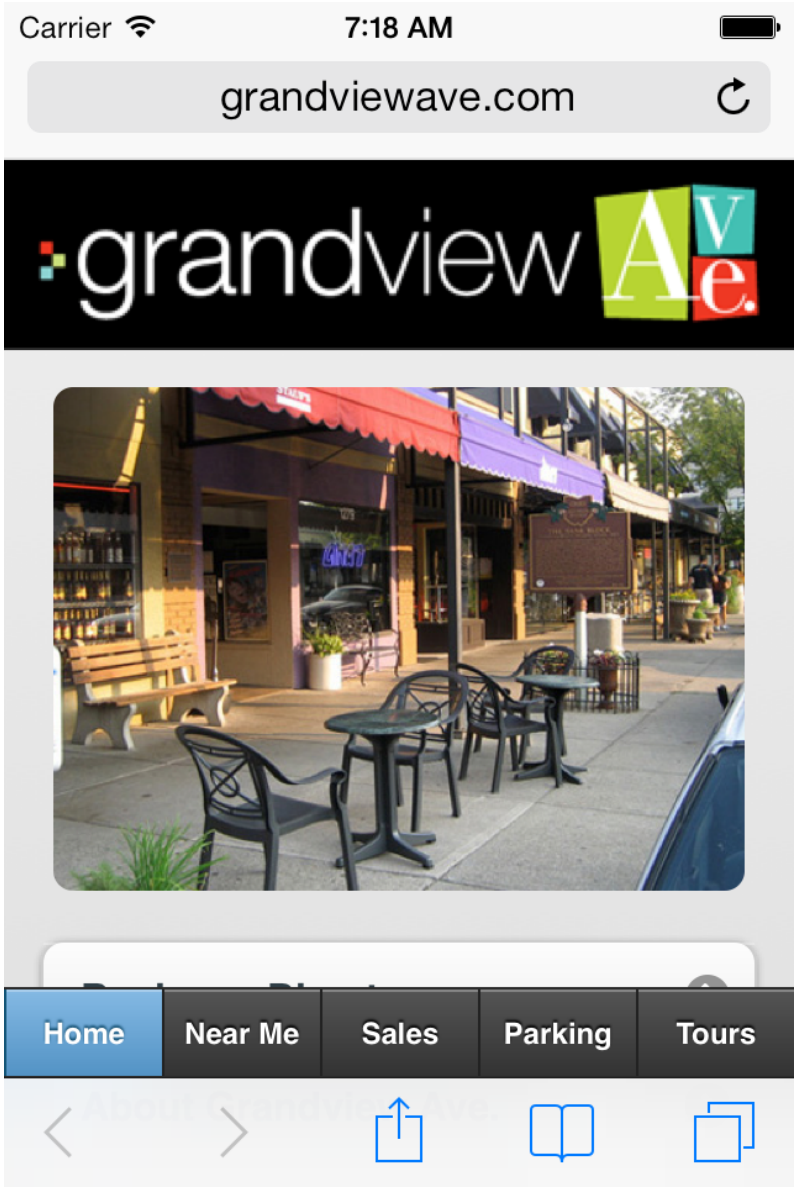
Appetize.io

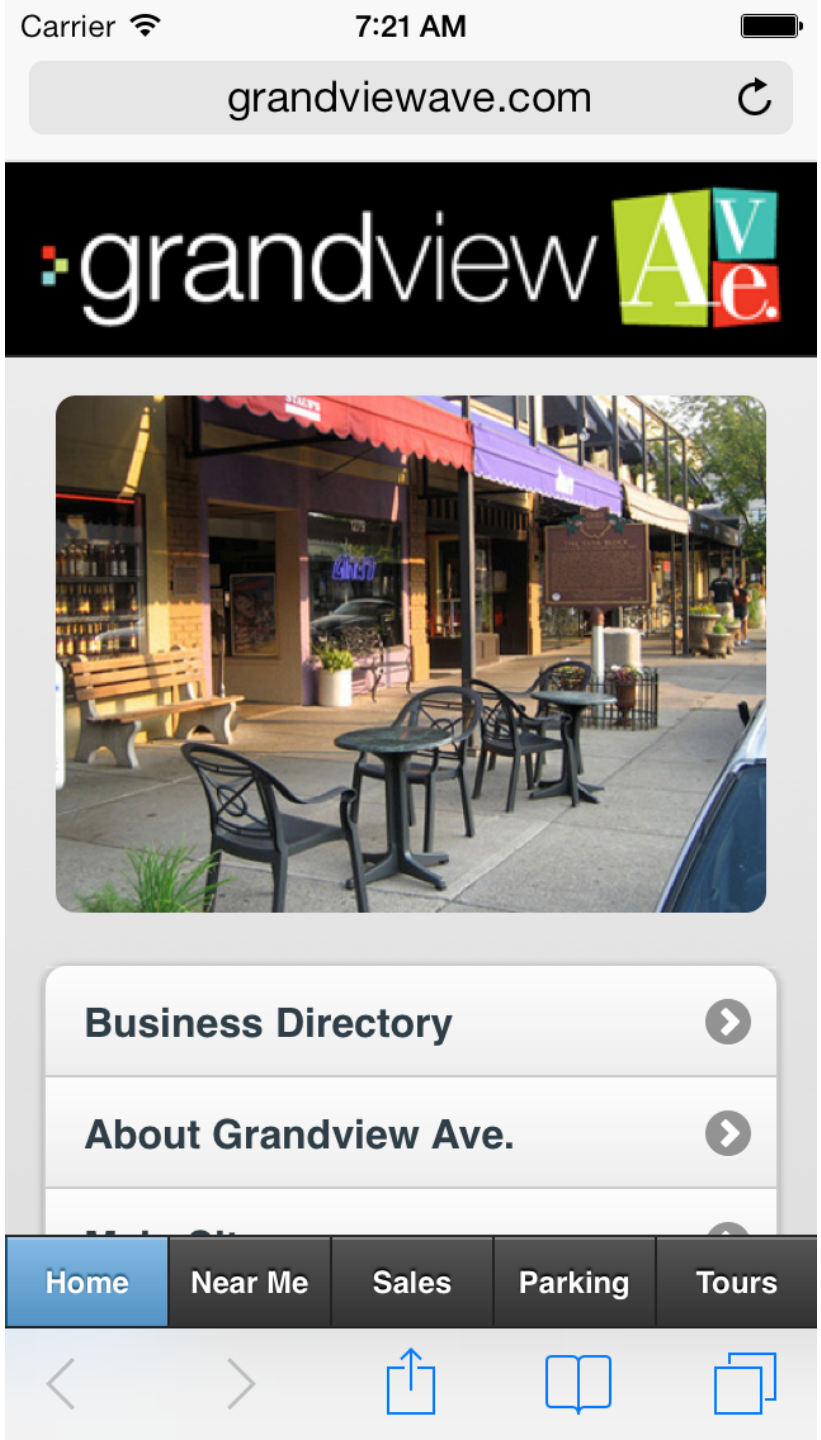


https://appetize.io/demo

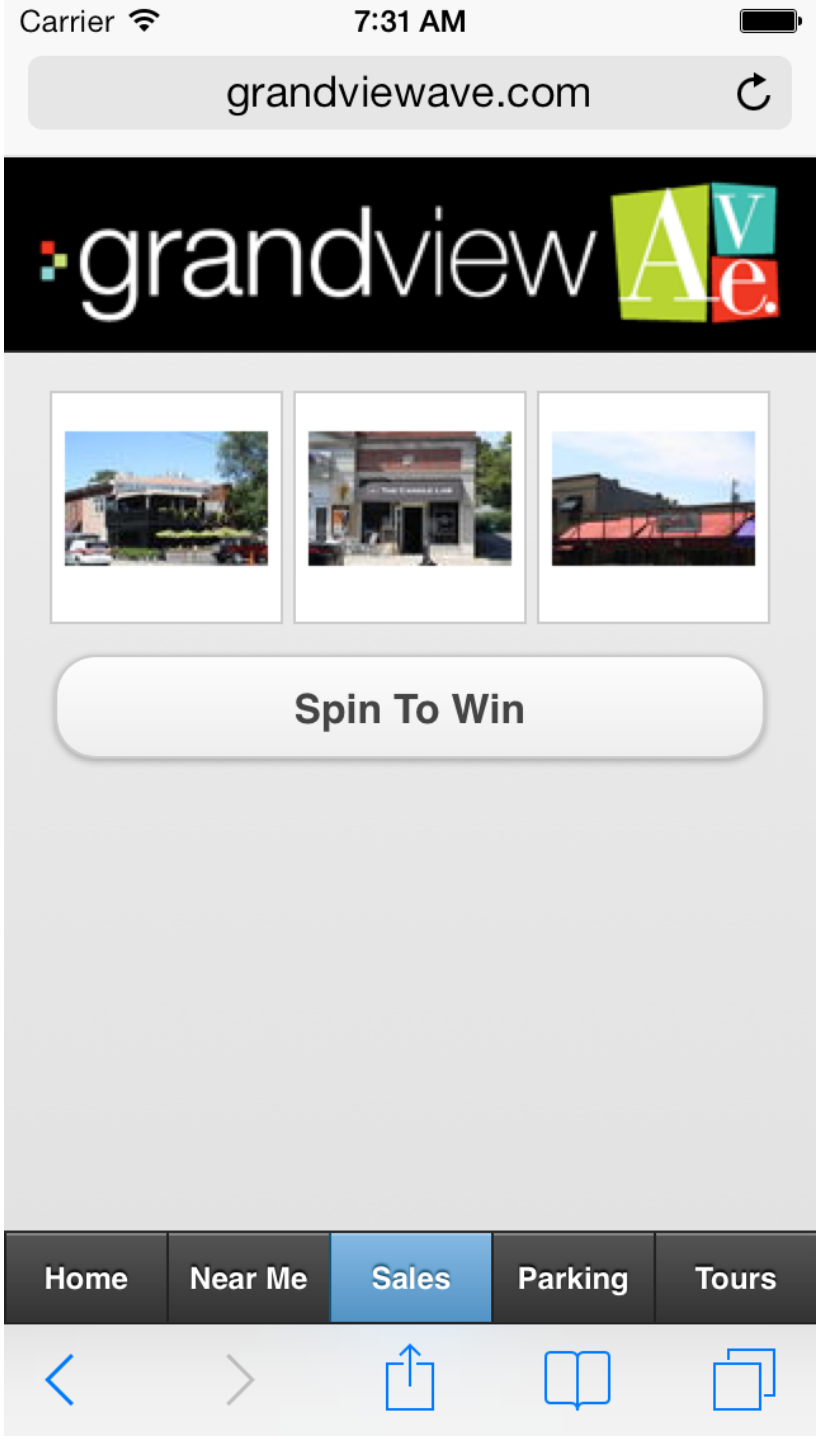
Xcode iPhone Simulator

http://grandviewave.com

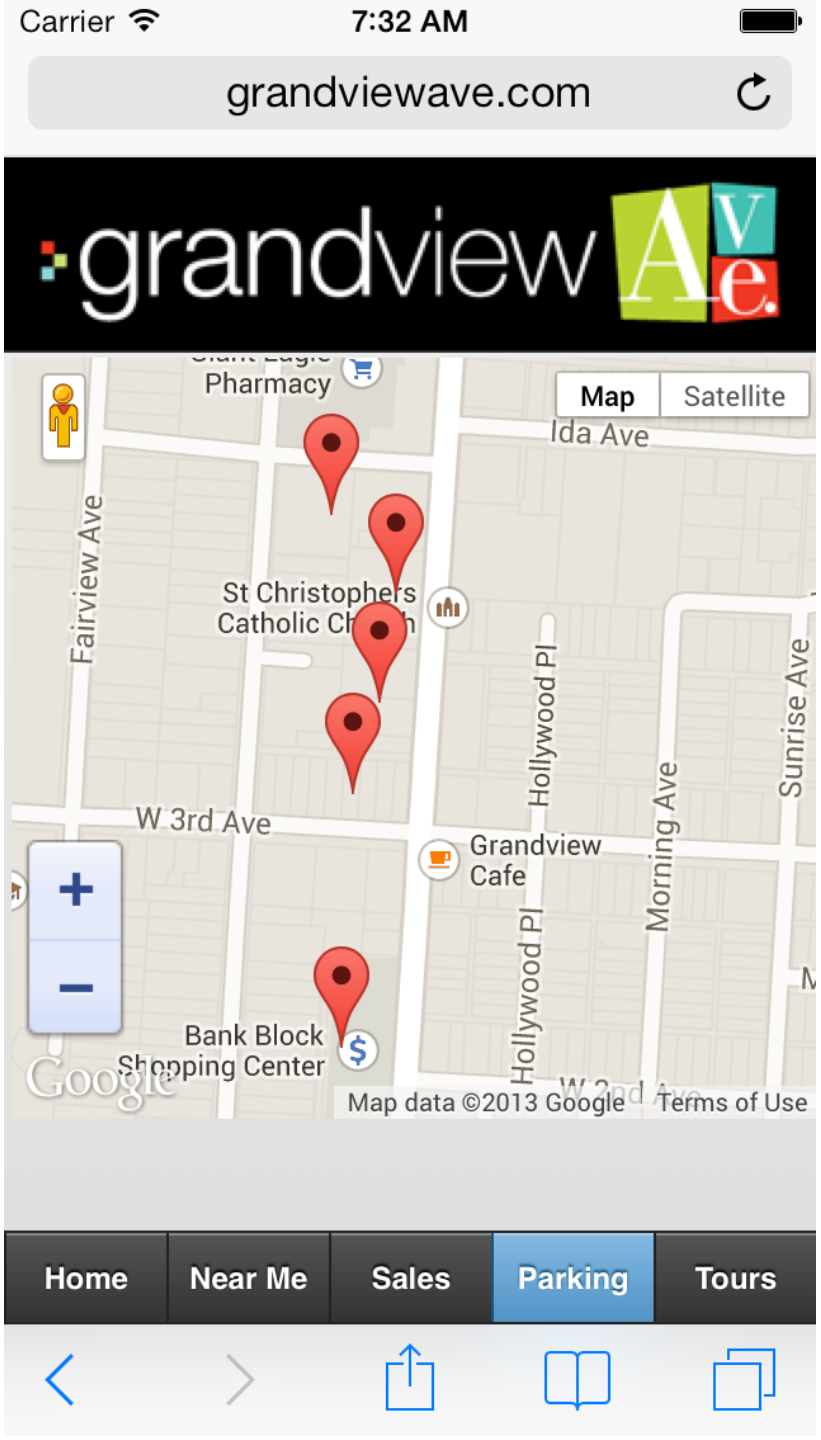




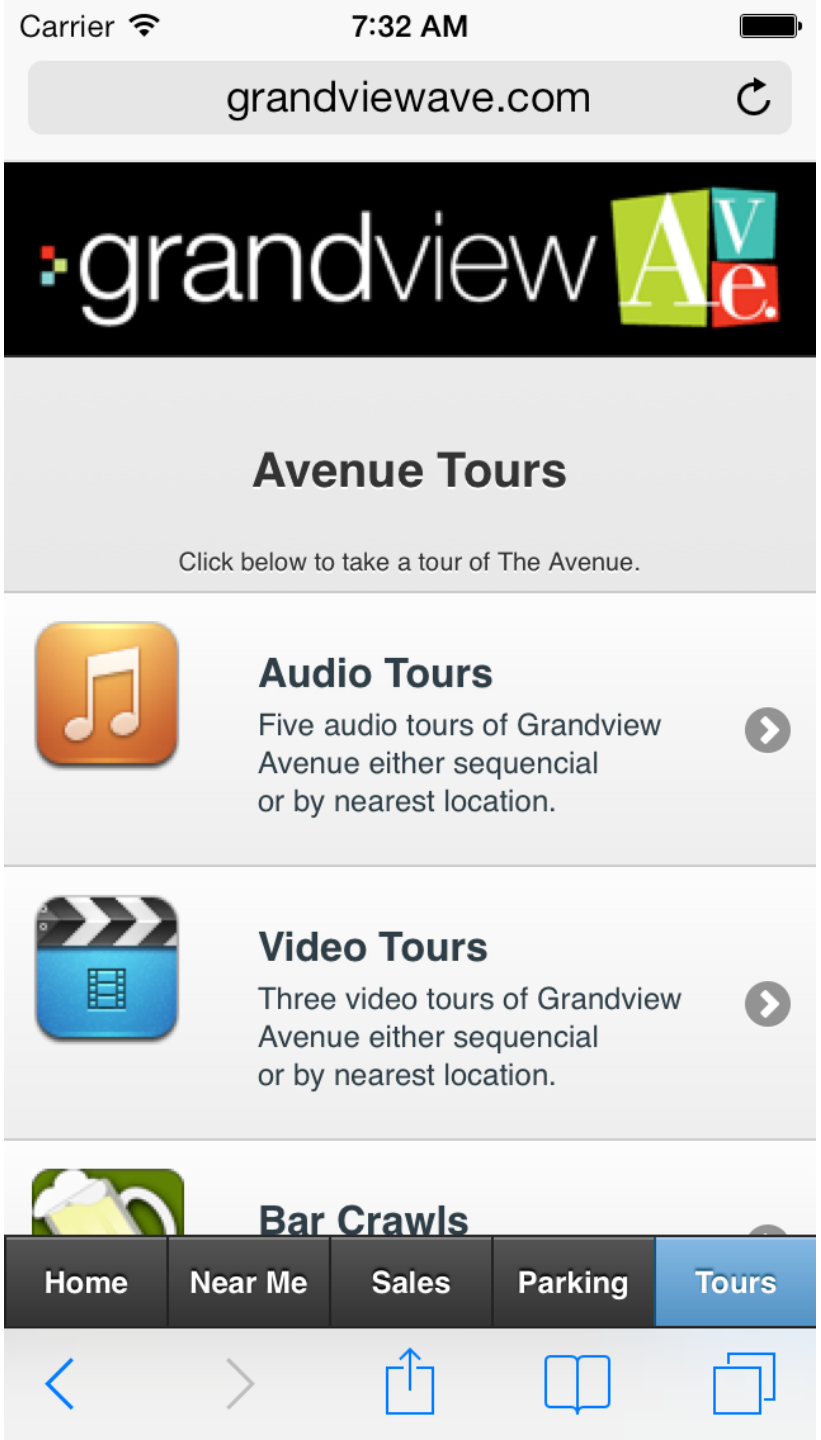
http://grandviewave.com



http://grandviewave.com



http://grandviewave.com



Demo

Building Mobile Apps with HTML5, CSS3, and JavaScript

http://jsbin.com

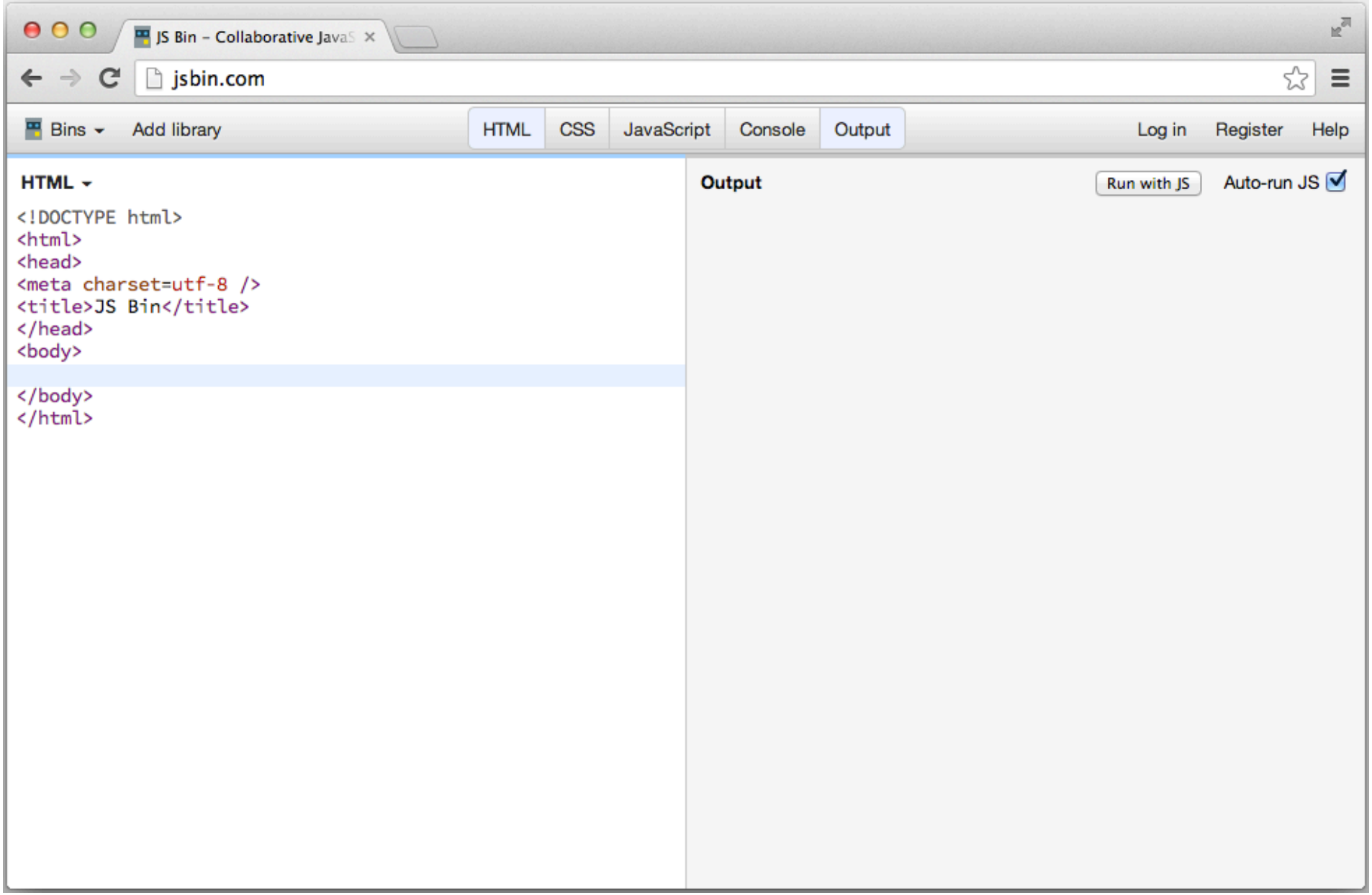
HTML5 CSS3 JavaScript
Hello World

index.html

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Hello World HTML5 by Myday</title>
  <style>
    body {background-color:yellow;}
    h1 {color:green}
    p {color:red;}
    div {color:blue; font-size:18px;}
  </style>
  <script language="javascript">
    function sayHello()
    {
      var strNameInput = document.getElementById('txtNameInput').value;
      var strOutput = "Hello, my friend, " + strNameInput;
      document.getElementById('divOutput').innerHTML = strOutput;
    }
  </script>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>What's your name?</p>
  <input id="txtNameInput" type="text"><br>
  <button type="button" id="btnClick1" onClick="sayHello()">Press Me!</button><br>
  <div id="divOutput">Hi</div>
</body>
</html>
```

http://jsbin.com/oWOsUcI/1

Online Editor: http://jsbin.com



http://jsbin.com/

CompileOnline: Try jQueryMobile Online

Try jQuery Mobile Online

www.compileonline.com/try_jquerymobile_online.php

compileonline</>com - Try jQueryMobile online

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Result Preview | HTML with jQuery Mobile | Default Ace Editor

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <title>Page Title</title>
5          <meta name="viewport" content="width=device-width, initial-scale=1" />
6          <script src="http://code.jquery.com/jquery-1.9.1.min.js"></script>
7          <link type="text/css" href="http://code.jquery.com/mobile/latest/jquery.mobile.min.css" rel
   ="stylesheet" />
8          <script type="text/javascript" src="http://code.jquery.com/mobile/latest/jquery.mobile.min.js"
   ></script>
9      </head>
10
11     <body>
12         <div data-role="page" id="first" data-theme="a">
13             <div data-role="header">
14                 <h1>Page Title1</h1>
15             </div><!-- /header -->
16
17             <div data-role="content">
18                 <p>Page content goes here.</p>
19                 <a href="#second">Go to second page</a>
20             </div><!-- /content -->
21
22             <div data-role="footer">
23                 <h4>Page Footer1</h4>
24             </div><!-- /footer -->
25         </div><!-- /page -->
26
27         <div data-role="page" id="second" data-add-back-btn="true" data-theme="b">
28             <div data-role="header">
29                 <h1>Page Title2</h1>
30             </div><!-- /header -->
31
32             <div data-role="content">
33                 <p>Page content goes here.</p>
34             </div><!-- /content -->
35
36             <div data-role="footer">
37                 <h4>Page Footer2</h4>
```

Result | Download Files

Page Title1

Page content goes here.

Go to second page

Page Footer1

javascript:void(0)

http://www.compileonline.com/try_jquerymobile_online.php

Hello World HTML5 by Myd

jsbin.com/oWOsUcI/1/edit

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HTML

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Hello World HTML5 by Myday</title>
  <style>
    body {background-color:yellow;}
    h1 {color:green}
    p {color:red;}
    div {color:blue; font-size:18px;}
  </style>
  <script language="javascript">
    function sayHello()
    {
      var strNameInput = document.getElementById('txtNameInput').value;
      var strOutput = "Hello, my friend, " + strNameInput;
      document.getElementById('divOutput').innerHTML = strOutput;
    }
  </script>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>What's your name?</p>
  <input id="txtNameInput" type="text"><br>
  <button type="button" id="btnClick1" onClick="sayHello()">Press Me!</button><br>
  <div id="divOutput">Hi</div>
</body>
</html>
```

Output Run with JS Auto-run JS

Hello, World!

What's your name?

iMyday

Press Me!

Hello, my friend, iMyday

http://jsbin.com/oWOsUcI/1/edit

HTML5

```html
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title>Hello World HTML5 by Myday</title>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>What's your name?</p>
  <input id="txtNameInput" type="text"><br>
  <button type="button" id="btnClick1">Press Me!</button><br>
  <div id="divOutput">Hi</div>
</body>
</html>
```

HTML5 Event

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title>Hello World HTML5 by Myday</title>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>What's your name?</p>
  <input id="txtNameInput" type="text"><br>
  <button type="button" id="btnClick1" onClick="sayHello()">Press Me!</button><br>
  <div id="divOutput">Hi</div>
</body>
</html>
```

HTML5 viewport

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Hello World HTML5 by Myday</title>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>What's your name?</p>
  <input id="txtNameInput" type="text"><br>
  <button type="button" id="btnClick1">Press Me!</button><br>
  <div id="divOutput">Hi</div>
</body>
</html>
```

HTML5

```
<body>
  <h1>Hello, World!</h1>
  <p>What's your name?</p>
  <input id="txtNameInput" type="text"><br>
  <button type="button" id="btnClick1" onClick="sayHello()">Press Me!</button><br>
  <div id="divOutput">Hi</div>
</body>
```

CSS3

```
<style>
  body {background-color:yellow;}
  h1 {color:green}
  p {color:red;}
  div {color:blue; font-size:18px;}
</style>
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JavaScript

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<script language="javascript">
  function sayHello()
  {
    var strNameInput = document.getElementById('txtNameInput').value;
    var strOutput = "Hello, my friend, " + strNameInput;
    document.getElementById('divOutput').innerHTML = strOutput;
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Mobile App with HTML5, CSS3, and JavaScript

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Hello World HTML5 by Myday</title>
  <style>
    body {background-color:yellow;}
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  </script>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>What's your name?</p>
  <input id="txtNameInput" type="text"><br>
  <button type="button" id="btnClick1" onClick="sayHello()">Press Me!</button><br>
  <div id="divOutput">Hi</div>
</body>
</html>
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Hello World HTML5 by Myd

jsbin.com/oWOsUcI/1/edit

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Output Run with JS Auto-run JS

Hello, World!

What's your name?

iMyday

Press Me!

Hello, my friend, iMyday

http://jsbin.com/oWOsUcI/1/edit

HTML5 CSS3 JavaScript
Hello World

index.html

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Summary

- Mobile Apps
- HTML5
  - **H**yper **T**ext **M**arkup **L**anguage (version 5)(2014)
  - Content and Structure
- CSS3
  - Cascading Style Sheets (version 3)
  - Presentation, Layout and User Interface
- JavaScript
  - Behavior and Business Logic

References

- Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Scott Preston, Apress, 2012
- Building Android Apps with HTML, CSS, and JavaScript: Making Native Apps with Standards-Based Web Tools, Jonathan Stark & Brian Jepson, O'reilly, 2012
- Building iPhone Apps with HTML, CSS, and JavaScript: Making App Store Apps Without Objective-C or Cocoa, Jonathan Stark, O'reilly, 2010
- What is HTML5?
  - https://www.youtube.com/watch?v=4oX9DXH4fiA
- What is CSS3?
  - https://www.youtube.com/watch?v=oHmm9dMAW0s
- What is JavaScript?
  - https://www.youtube.com/watch?v=955L9-NoBoE
- HTML5 Tutorial For Beginners
  - https://www.youtube.com/watch?v=9gTw2EDkaDQ
- CSS Tutorial for Beginners
  - https://www.youtube.com/watch?v=Wz2klMXDqF4
- JavaScript & jQuery Tutorial for Beginners
  - https://www.youtube.com/watch?v=VRnQOcVclS8