



Social Media Apps Programming

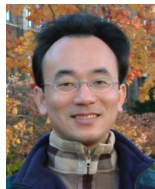
Course Orientation and Introduction to Social Media and Mobile Apps Programming

1021SMAP01

TLMXM1A (8687) (M2143) (Fall 2013)

(MIS MBA) (2 Credits, Elective) [Full English Course]

Thu 9,10 (16:10-18:00) B310



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Assistant Professor

Department of Information Management

Tamkang University

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



#1 Activity on the Web?

Social Media



The Complete Social Media Community Manager's Guide

Essential Tools and Tactics for Business Success



SYBEX

SERIOUS SKILLS.

Marty Weintraub and Lauren Litwinka

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

Making App Store Apps Without Objective-C or Cocoa



Copyrighted Material

PhoneGap: <http://phonegap.com/>

The screenshot shows the PhoneGap website homepage. At the top, there's a navigation bar with links for 'About', 'Developer', 'Community', 'Apps', and 'Support', along with an 'Install' button. The main content area features a large heading 'Easily create apps using the web technologies you know and love: HTML, CSS, and JavaScript'. Below this, a paragraph describes PhoneGap as a free and open source framework. To the right, there's a video player with a 'Watch Intro' button. At the bottom, a process flow diagram illustrates the steps: 'Wrap your app with PhoneGap' and 'Deploy to mobile platforms!'. The background has a subtle geometric pattern.

PhoneGap | Home

phonegap.com

PhoneGap About Developer Community Apps Support Install

Easily create apps using the web technologies you know and love: **HTML, CSS, and JavaScript**

PhoneGap is a free and open source framework that allows you to create mobile apps using standardized web APIs for the platforms you care about.

Install PhoneGap ▶ Getting Started Guides ▶

Watch Intro

Wrap your app with PhoneGap

Deploy to mobile platforms!



Course Syllabus

Tamkang University

Academic Year 102, 1st Semester (Fall, 2013)

- Course Title: Social Media Apps Programming
- Instructor: Min-Yuh Day
- Course Class: TLMXM1A (MIS MBA)
 - Master's Program, Department of Information Management, 1A
- Details
 - Selective
 - One Semester
 - 2 Credits
- Time & Place: Thu 9,10 (16:10-18:00) B310



Department Teaching Objectives

- Devoting to the integration and research of information technology and business management knowledge
- Cultivating for society, middle and higher level managers with both information capabilities and modern management skills



Department Core Competences

1. Use of modern management knowledge
2. Logical thinking
3. Critical analysis
4. Integration of information technology and business management
5. Research and innovation
6. Theory and applications data analysis
7. Information and communication security management
8. Verbal and writing communication skills



Course Introduction

- This course introduces the **fundamental concepts and practices** of **social media** and **mobile apps programming**.
- Topics include
 - Introduction to **Android / iOS apps programming**,
 - Developing **Android native apps with Java (Eclipse)**,
 - Developing **iPhone / iPad apps native apps with objective-C (XCode)**,
 - **Mobile apps using HTML5/CSS3/JavaScript**,
 - **jQuery Mobile**,
 - Create **hybrid apps with Phonegap**,
 - **Google app engine, Google map API**,
 - **Facebook API**,
 - **Twitter API**,
 - Case study on social media apps programming and **marketing** in **Google Play** and **App Store**.



Teaching Objectives

Students will be able to
understand and apply
the fundamental concepts
and practices of
social media and
mobile apps programming



Teaching Methods

- Lecture
- Discussion
- Simulation
- Practicum
- Problem Solving

Assessment

- Practicum
 - Report
- Participation

Course Schedule (1/3)

Week Date Subject/Topics

- 1 2013/09/19 Mid-Autumn Festival (Day off)
- 2 2013/09/26 Course Orientation and Introduction to Social Media and Mobile Apps Programming
- 3 2013/10/03 Introduction to Android / iOS Apps Programming
- 4 2013/10/10 Double Tenth Day (Day off)
- 5 2013/10/17 Developing Android Native Apps with Java (Eclipse) (MIT App Inventor)
- 6 2013/10/24 Developing iPhone / iPad Apps Native Apps with Objective-C (Xcode)

Course Schedule (2/3)

Week Date Subject/Topics

- 7 2013/10/31 Mobile Apps using HTML5/CSS3/JavaScript
- 8 2013/11/07 jQuery Mobile
- 9 2013/11/14 Create Hybrid Apps with Phonegap
- 10 2013/11/21 Midterm Exam Week (Midterm Project Report)
- 11 2013/11/28 jQuery Mobile/Phonegap
- 12 2013/12/05 Google App Engine

Course Schedule (3/3)

Week	Date	Subject/Topics
• 13	2013/12/12	Google Map API
• 14	2013/12/19	Facebook API (Facebook JavaScript SDK) (Integrate Facebook with iOS/Android Apps)
• 15	2013/12/26	Twitter API
• 16	2014/01/02	Case Study on Social Media Apps Programming and Marketing in Google Play and App Store
• 17	2014/01/09	Final Project Presentation
• 18	2014/01/16	Final Exam Week (Final Project Report)

Grading Policy

- Mark of Usual: 50%
- Final Apps Project: 50%
 - Midterm Project Report
 - Final Project Report

Textbooks and References

- Textbook: Slides
 - <http://mail.tku.edu.tw/myday/teaching.htm#1021SMAP>
- Jonathan Stark, Building iPhone Apps with HTML, CSS, and JavaScript: Making App Store Apps Without Objective-C or Cocoa, O'reilly, 2010.
- Rohit Ghatol and Yogesh Patel, Beginning PhoneGap: Mobile Web Framework for JavaScript and HTML5, Apress, 2012.
- Jon Reid, jQuery Mobile, O'reilly, 2012.

References

- jQuery Mobil: <http://jquerymobile.com/>
- PhoneGap: <http://phonegap.com/>
- MIT App Inventor: <http://appinventor.mit.edu/>
- Apple Developer: <https://developer.apple.com/>
- Android Developer: <http://developer.android.com/>
- Facebook Developers: <https://developers.facebook.com/>
- Twitter Developers: <https://dev.twitter.com/>
- Google App Engine: <https://developers.google.com/appengine/>
- Gephi: Social Network Analysis and Visualization:
<https://gephi.org/>
- Netvizz: Facebook Netvizz app:
<https://apps.facebook.com/netvizz/>

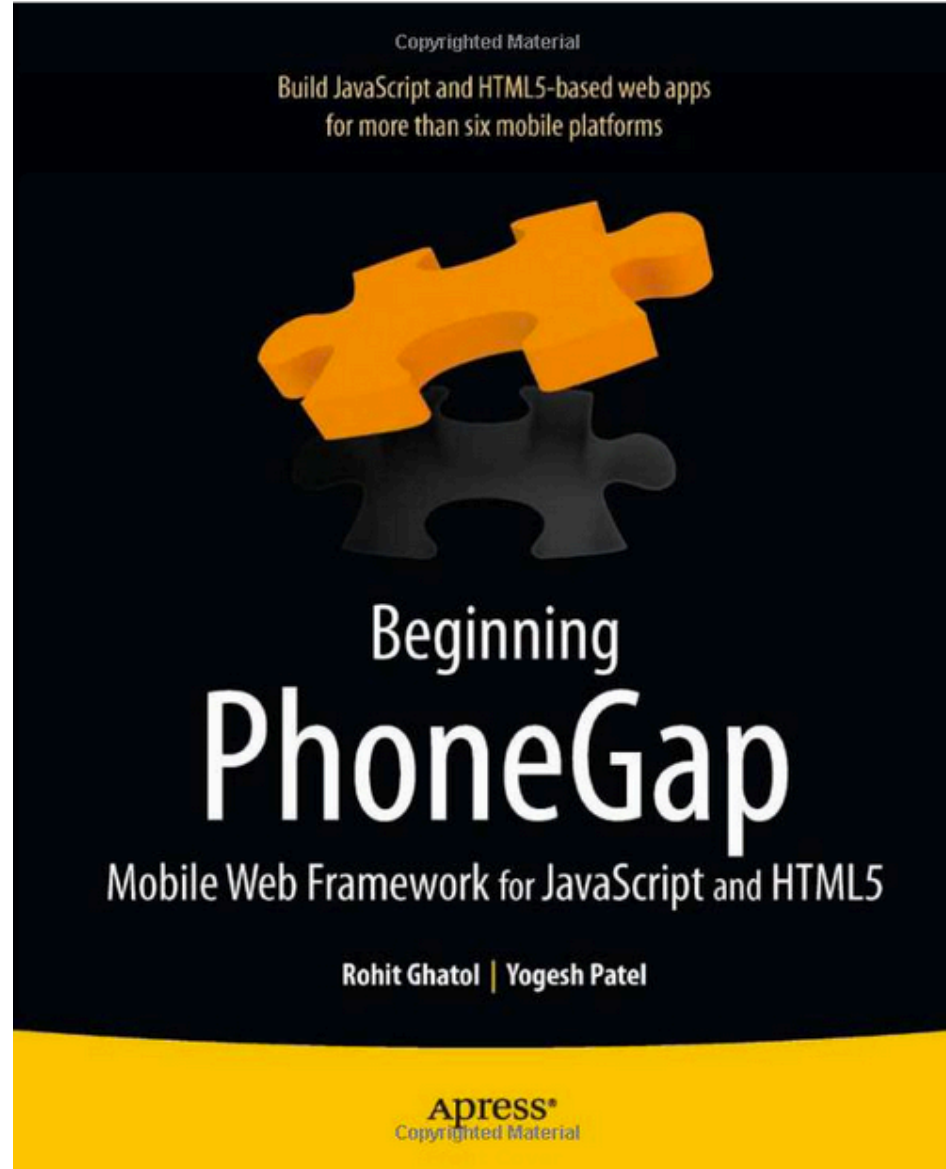
Jonathan Stark, Building iPhone Apps with HTML, CSS, and JavaScript: Making App Store Apps Without Objective-C or Cocoa, O'reilly, 2010

Making App Store Apps Without Objective-C or Cocoa



Copyrighted Material

Rohit Ghatol and Yogesh Patel, Beginning PhoneGap: Mobile Web Framework for JavaScript and HTML5, Apress, 2012



Jon Reid, jQuery Mobile, O'reilly, 2012



jQuery Mobil: <http://jquerymobile.com/>



The screenshot shows the jQuery Mobile website homepage. At the top, there's a navigation bar with links: jQuery, UI, Mobile (highlighted), Plugins, Meetups, Forum, Events, About, and Donate. Below this is a secondary navigation bar with links: Demos, API, Download, Platforms, Themes, Resources, and Blog. The main content area features the jQuery Mobile logo on the left. To the right, there's a yellow banner announcing 'JQUERY MOBILE 1.4.0 BETA RELEASED!'. Below this, the heading 'jQuery Mobile: Touch-Optimized Web Framework for Smartphones & Tablets' is followed by a paragraph describing the framework as a unified, HTML5-based user interface system. To the right of the text is an image showing three mobile devices (a tablet, a smartphone, and a feature phone) displaying the jQuery Mobile logo. Below the image, there's a section titled 'Seriously cross-platform with HTML5' with a paragraph explaining the 'write less, do more' mantra and a link to 'Device support'.

jQuery Mobile | jQuery Mo x

jquerymobile.com

jQuery UI Mobile Plugins Meetups Forum Events About Donate

jQuery
mobile

Demos API Download Platforms Themes Resources Blog

JQUERY MOBILE 1.4.0 BETA RELEASED!

jQuery Mobile: Touch-Optimized Web Framework for Smartphones & Tablets

A unified, HTML5-based user interface system for all popular mobile device platforms, built on the rock-solid jQuery and jQuery UI foundation. Its lightweight code is built with progressive enhancement, and has a flexible, easily themeable design.

Latest stable version - 1.3.2 [↗](#)

Legacy versions: [1.2.1](#) - [1.1.2](#) - [1.0.1](#)

Seriously cross-platform with HTML5

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

PhoneGap: <http://phonegap.com/>

The screenshot shows the PhoneGap website homepage. At the top, there's a navigation bar with links: PhoneGap, About, Developer, Community, Apps, and Support. An 'Install' button is on the right. The main content area features a large heading: 'Easily create apps using the web technologies you know and love: **HTML, CSS, and JavaScript**'. Below this, a paragraph states: 'PhoneGap is a free and open source framework that allows you to create mobile apps using standardized web APIs for the platforms you care about.' There are two buttons: 'Install PhoneGap' and 'Getting Started Guides'. To the right is a video player with a 'Watch Intro' button. At the bottom, a process diagram shows three steps: 1. 'Wrap your app with PhoneGap' (represented by icons of JS, CSS, and HTML files), 2. 'Deploy to mobile platforms!' (represented by a box containing the files), and 3. 'Deploy to mobile platforms!' (represented by icons of mobile devices).

PhoneGap | Home

phonegap.com

PhoneGap About Developer Community Apps Support

Install

Easily create apps using the web technologies you know and love: **HTML, CSS, and JavaScript**

PhoneGap is a free and open source framework that allows you to create mobile apps using standardized web APIs for the platforms you care about.

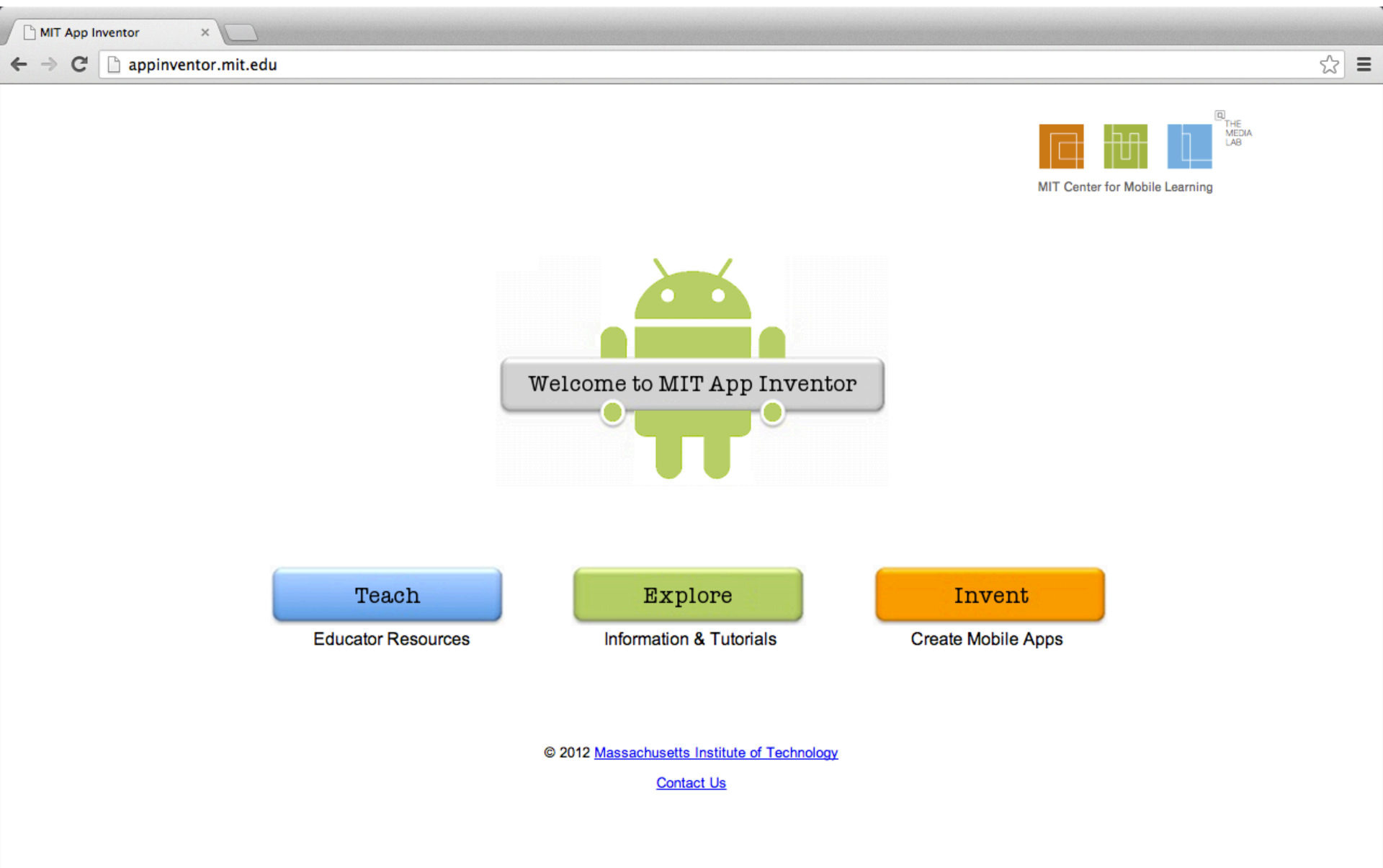
Install PhoneGap ▶ Getting Started Guides ▶

Watch Intro

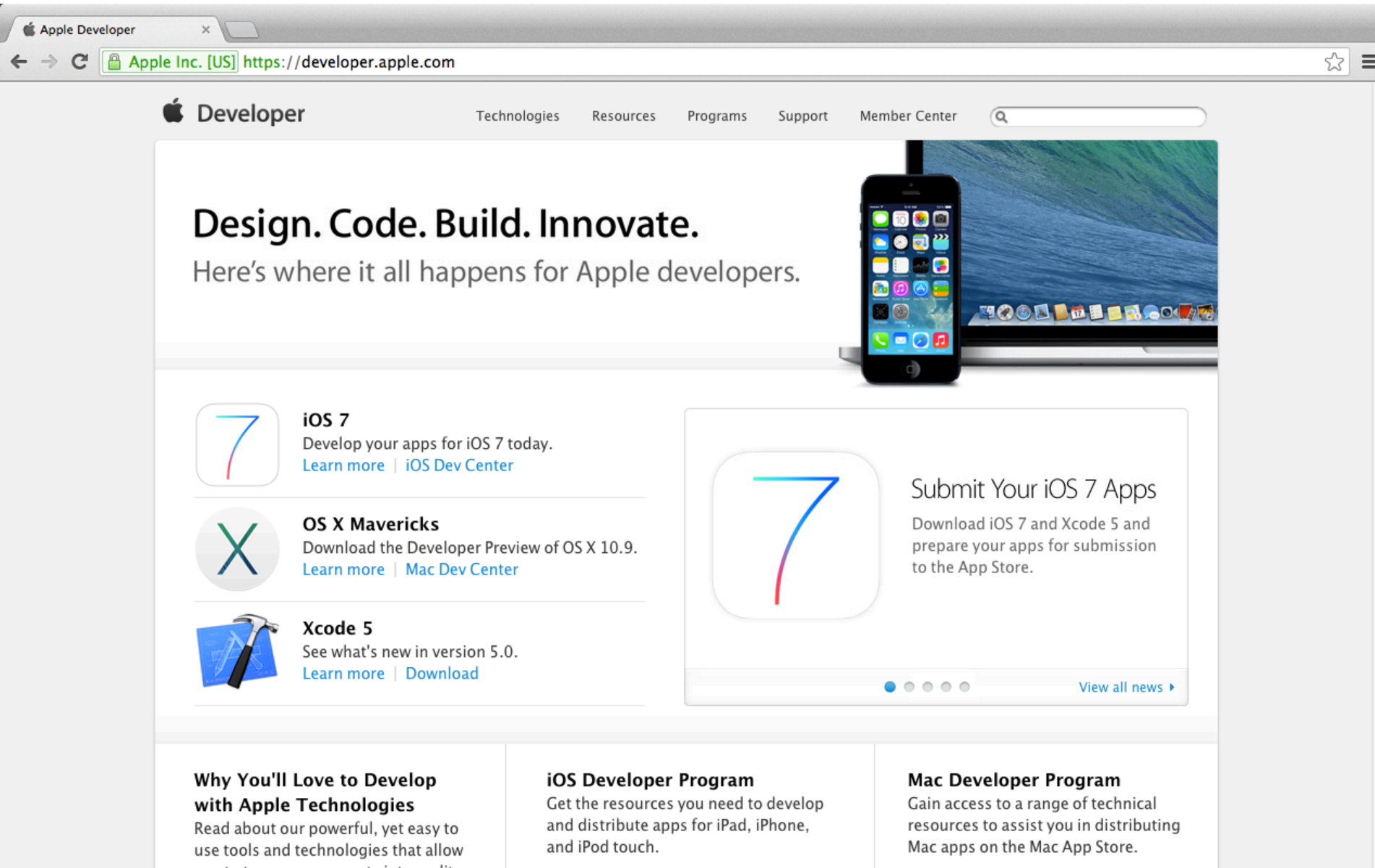
Wrap your app with PhoneGap

Deploy to mobile platforms!

MIT App Inventor: <http://appinventor.mit.edu/>



Apple Developer: <https://developer.apple.com/>



The screenshot shows the Apple Developer website in a web browser. The browser's address bar displays "Apple Inc. [US] https://developer.apple.com". The website's header includes the "Developer" logo and navigation links for "Technologies", "Resources", "Programs", "Support", and "Member Center". A search bar is located on the right side of the header. The main content area features a large banner with the text "Design. Code. Build. Innovate." and "Here's where it all happens for Apple developers." To the right of the banner is an image of an iPhone and a Mac. Below the banner, there are three main sections: "iOS 7" with a large number 7 icon, "OS X Mavericks" with a large X icon, and "Xcode 5" with a hammer icon. Each section includes a brief description and links to "Learn more" and "iOS Dev Center", "Mac Dev Center", or "Download". To the right of these sections is a large box titled "Submit Your iOS 7 Apps" with a large number 7 icon and text about downloading iOS 7 and Xcode 5. At the bottom of the page, there are three columns: "Why You'll Love to Develop with Apple Technologies", "iOS Developer Program", and "Mac Developer Program".

Apple Developer

Technologies Resources Programs Support Member Center

Design. Code. Build. Innovate.
Here's where it all happens for Apple developers.

iOS 7
Develop your apps for iOS 7 today.
[Learn more](#) | [iOS Dev Center](#)

OS X Mavericks
Download the Developer Preview of OS X 10.9.
[Learn more](#) | [Mac Dev Center](#)

Xcode 5
See what's new in version 5.0.
[Learn more](#) | [Download](#)

Submit Your iOS 7 Apps
Download iOS 7 and Xcode 5 and prepare your apps for submission to the App Store.

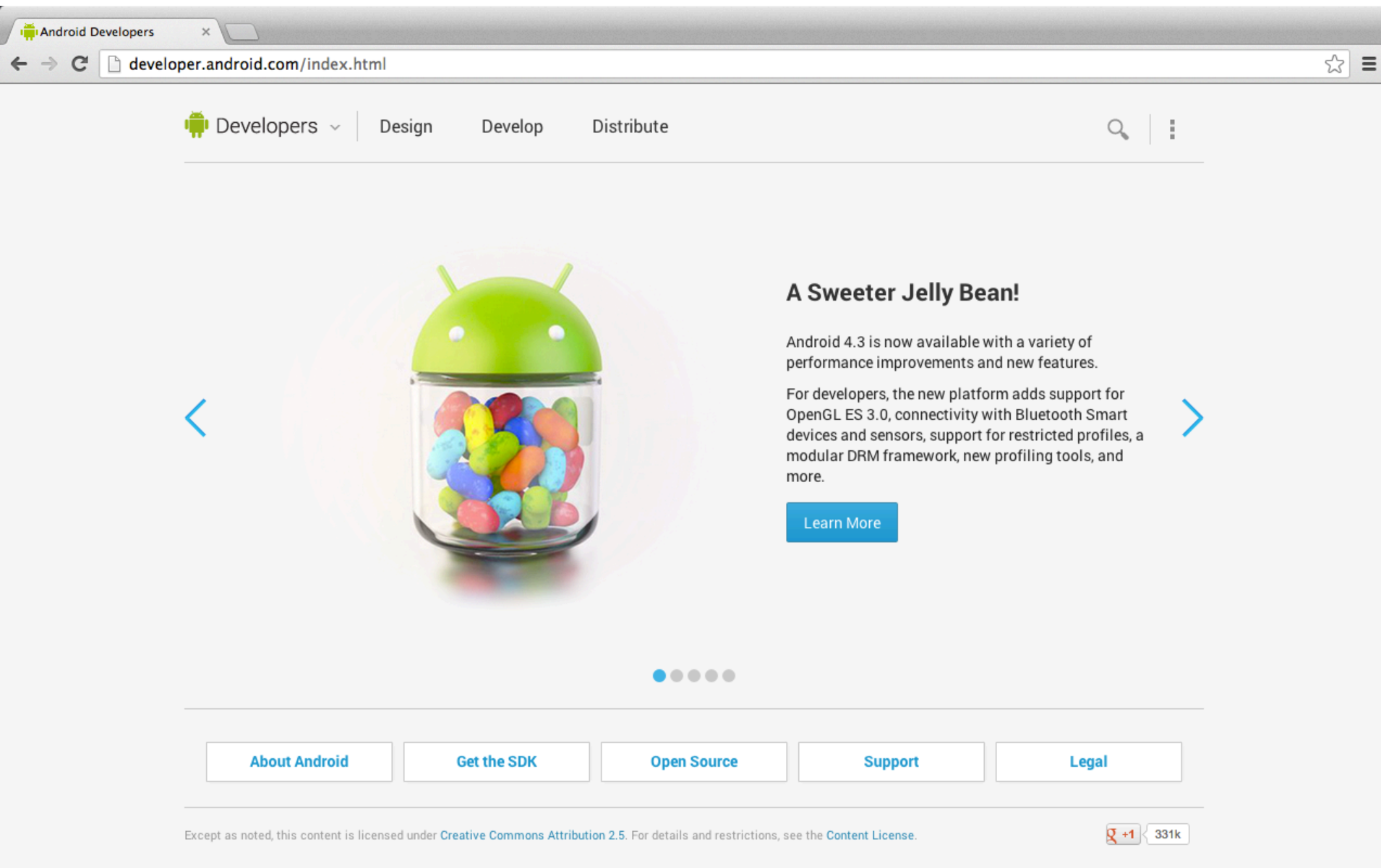
[View all news](#)

Why You'll Love to Develop with Apple Technologies
Read about our powerful, yet easy to use tools and technologies that allow you to turn your concepts into reality.

iOS Developer Program
Get the resources you need to develop and distribute apps for iPad, iPhone, and iPod touch.

Mac Developer Program
Gain access to a range of technical resources to assist you in distributing Mac apps on the Mac App Store.

Android Developer: <http://developer.android.com/>



The screenshot shows the Android Developer website. The browser's address bar displays `developer.android.com/index.html`. The navigation bar includes links for **Design**, **Develop**, and **Distribute**, along with a search icon and a menu icon. The main content area features a large image of the Android robot head inside a glass jar filled with colorful jelly beans. To the right of the image, the heading **A Sweeter Jelly Bean!** is followed by text about Android 4.3. Below this text is a blue **Learn More** button. At the bottom of the page, there are five buttons: **About Android**, **Get the SDK**, **Open Source**, **Support**, and **Legal**. A footer note states that the content is licensed under Creative Commons Attribution 2.5, and a Google+ icon shows 331k followers.

Android Developers

Design Develop Distribute

A Sweeter Jelly Bean!


Android 4.3 is now available with a variety of performance improvements and new features.

For developers, the new platform adds support for OpenGL ES 3.0, connectivity with Bluetooth Smart devices and sensors, support for restricted profiles, a modular DRM framework, new profiling tools, and more.

[Learn More](#)

[About Android](#) [Get the SDK](#) [Open Source](#) [Support](#) [Legal](#)

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 +1 331k

Facebook Developers: <https://developers.facebook.com/>

Home – Facebook Develop

https://developers.facebook.com

facebook developers

Search Facebook Developers

Docs Tools Support News Apps

Min-Yuh Day

Facebook SDK for Unity

Simple cross-platform development.
Immersive full-screen game experience.

[Download the SDK](#) or [Learn More](#)





iOS

Integrate Facebook with your native iOS apps.



Android

Integrate Facebook with your native Android apps.



Web

Integrate Facebook with your website or host your apps in Facebook.com.

Latest Updates

- Platform Status:** Facebook Platform is Healthy
- Platform Updates:** Facebook iOS SDK 3.8, Larger Images for Link Page Posts, and Custom Audiences Update
September 19 by Chris Pan
- Parse Developer Day Kicks Off with Five New Products**
September 6 by Ilya Sukhar

[More](#)

Object API



Object API

Create Open Graph Objects

Easily integrate Open Graph Objects into your apps. Works on mobile and web – no web server needed! [Learn more](#)

Showcase



See how companies make their sites personalized and social with Facebook

Twitter Developers: <https://dev.twitter.com/>

Twitter Developers

← → ↺ <https://dev.twitter.com> ☆ ☰

Developers API Health Blog Discussions Documentation Search Sign in

More downloads for your app with Twitter Cards

Twitter Cards offer a fast and easy way to grow your user base for mobile apps. Simply add some new markup to your pages: when users tweet links to your domain, Cards will let other users viewing those Tweets to download and launch your app across a number of mobile platforms.

[Learn More](#)

The diagram illustrates a cycle of app promotion. It starts with a 'Tweet' containing a Twitter Card. This card has an 'INSTALL' button. An arrow points from the card to an 'App Store' interface, which also has an 'INSTALL' button. Another arrow points from the App Store to a 'Tweet' with a card. A final arrow points from this tweet back to the App Store, completing the cycle. The background features faint, overlapping circles.

Twitter Cards

Embedded Timelines

Embedded Tweets

Tweet Button

Follow Button

Recent posts from Twitter Developer Blog

Sep 12 [Streaming SSL certificate updates](#)

Create applications that integrate Twitter

[Get started with the platform](#)

Google App Engine: <https://developers.google.com/appengine/>

The screenshot shows the Google App Engine developer page. At the top, there's a navigation bar with the Google Developers logo, a search bar, and a 'Sign in' button. Below this is a dark navigation bar with links to Home, Products, Conferences, Showcase, Live, and Groups. The main content area features a large hero section with a blue and white turbine graphic. The text 'Power Your Business with Google Cloud' is at the top of the hero section, and 'Run your Apps, Host your Sites, Store your Data' is at the bottom. A red 'Sign Up' button is on the right. To the left of the hero section is a sidebar with a list of links: 'What Is Google App Engine?', 'App Engine Features', 'Downloads', 'Getting Started', 'Java', 'Python', 'Go Experimental!', 'PHP Experimental!', 'Managing Your App', 'Code, Videos, and Tutorials', 'Get Help', 'Further Reading', 'Admin Console', 'System Status', and 'FAQ'. Below the hero section, there's a section titled 'Easy to build, Easy to scale, Easy to maintain' with two bullet points: 'Zero to sixty: Scale your app automatically without worrying about managing machines.' and 'Supercharged APIs: Supercharge your app with services such as Task Queue, XMPP, and Cloud SQL, all powered by the same infrastructure that powers the Google services you use every day.' To the right of this section is a 'Featured Videos' section with a clapperboard icon and a link to 'In-Depth Training Series'.

Google App Engine — Google Developers

<https://developers.google.com/appengine/>

Google App Engine X Search

Sign in

Home Products Conferences Showcase Live Groups

Google App Engine +1 9.5k

Feedback on this document

What Is Google App Engine?

App Engine Features

Downloads

▶ Getting Started

▶ Java

▶ Python

▶ Go *Experimental!*

▶ PHP *Experimental!*

▶ Managing Your App

▶ Code, Videos, and Tutorials

▶ Get Help

▶ Further Reading

Admin Console

System Status

FAQ

Power Your Business with Google Cloud

Run your Apps, Host your Sites, Store your Data

Sign Up


Easy to build, Easy to scale, Easy to maintain

- **Zero to sixty:** Scale your app automatically without worrying about managing machines.
- **Supercharged APIs:** Supercharge your app with services such as Task Queue, XMPP, and Cloud SQL, all powered by the same infrastructure that powers the Google services you use every day.

Featured Videos

• [In-Depth Training Series](#)

Gephi: Social Network Analysis and Visualization: <https://gephi.org/>



Gephi
makes graphs handy

[Download](#) [Blog](#) [Store](#) [Wiki](#) [Forum](#) [Support](#) [Bug tracker](#)


[Home](#) [Features](#) [Learn](#) [Develop](#) [Plugins](#) [Services](#) [Consortium](#)

The Open Graph Viz Platform

Gephi is an interactive visualization and exploration platform for all kinds of networks and complex systems, dynamic and hierarchical graphs.

Runs on Windows, Linux and Mac OS X. Gephi is open-source and free.

[Learn More on Gephi Platform »](#)



Download FREE
Gephi 0.8.2-beta

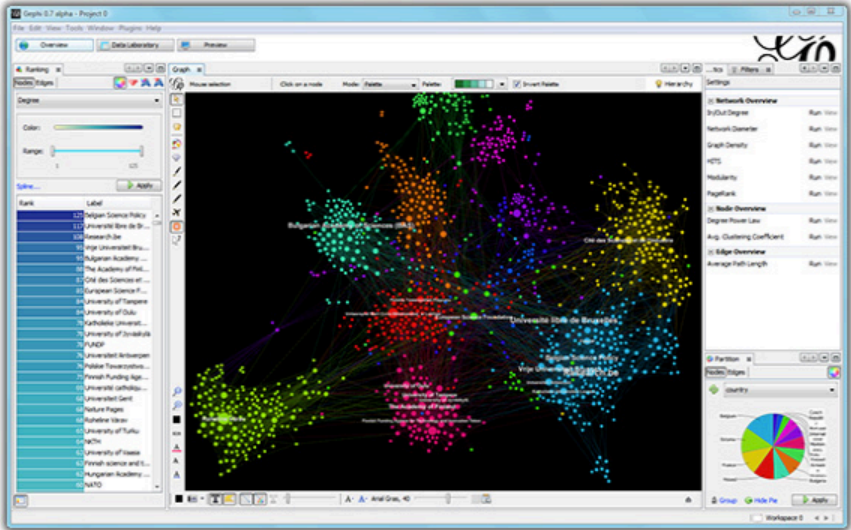
[Release Notes](#) | [System Requirements](#)

► **Features**

► **Quick start**


► **Screenshots**

► **Videos**



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APPLICATIONS

- ✓ **Exploratory Data Analysis:** intuition-oriented analysis by networks manipulations in real time.
- ✓ **Link Analysis:** revealing the underlying structures of associations between objects, in particular in scale-free networks.

“Like Photoshop™ for graphs.

— the Community

LATEST NEWS

Google Summer of Code 2012

PAPERS



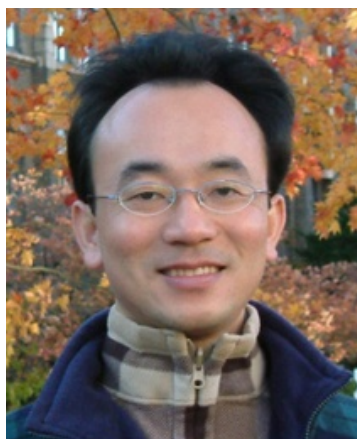
Summary

- This course introduces the fundamental concepts and practices of social media and mobile apps programming.
- Topics include
 - Introduction to Android / iOS apps programming,
 - Developing Android native apps with Java (Eclipse),
 - Developing iPhone / iPad apps native apps with objective-C (XCode),
 - Mobile apps using HTML5/CSS3/JavaScript,
 - jQuery Mobile,
 - Create hybrid apps with Phonegap,
 - Google app engine, Google map API,
 - Facebook API,
 - Twitter API,
 - Case study on social media apps programming and marketing in Google Play and App Store.



Social Media Apps Programming

Contact



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