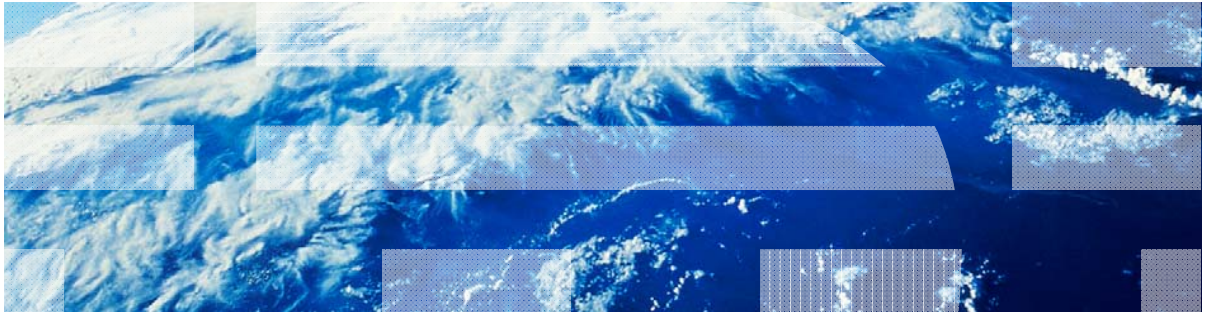


# ***IBM Worklight V5.0.6 Getting Started***

## General information when developing for iOS



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# Agenda

- Installation
- Development
  - Environment-specific APIs
  - Environment-specific images
- Testing
  - Debugging the app
- Deployment

## Installation

See ***Setting up your iOS Development Environment*** for a detailed explanation



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## *iOS development*

- An iPhone application that is enabled with IBM Worklight® comprises the following components:
  - The `www.bundle` files, which are written in HTML, CSS and JavaScript™, running in one or more instances of the ***UIWebView*** hosted within the Main class.
  - An Objective-C ("native") Main class that is provided by IBM Worklight.
  - A set of Objective-C and JavaScript libraries that provide access to various iPhone features and capabilities.
- All application components, including the web code that the developer provides, are packaged into a single iPhone application.
- If you use a source control management system (such as Rational Team Concert, GIT or Subversion), see the IBM Worklight user documentation for instructions for committing your source code to such systems.

## ***Developing for different resolutions***

- Various iOS devices have different screen resolutions:
  - iPhone 2/3/3GS - 320x480
  - iPhone 4/4S – 640x960
  - iPad – 1024x768
- iOS assumes that the HTML file of the application was styled for a screen width of 320 pixels.
- When you are displaying graphical elements on wider screens, iOS automatically scales images and fonts to the appropriate ratio.
- For example, on a 640-pixel wide screen, a 100-pixel wide image is scaled by  $640/320 (= 2)$  to 200 pixels in width, and text that is displayed with an 18-pixel font is displayed with 36 pixels.

## *Developing for different resolutions*

- The following points are the developer's responsibility:
  - **To ensure that images look good at all resolutions:**
    - Provide images for the environment with the highest resolution requirements.
    - In your CSS, scale the image width to the lower resolution.
    - In the previous example, provide an image with a width of 200 pixels, and in the CSS scale it to 100 pixels. iOS scales it back by a factor of 2 to be 200 pixels wide.
  - **Ensure that text is displayed appropriately at all resolutions**
    - Consider specifying font sizes in ems, rather than in pixels.



## Developing for Different Resolutions

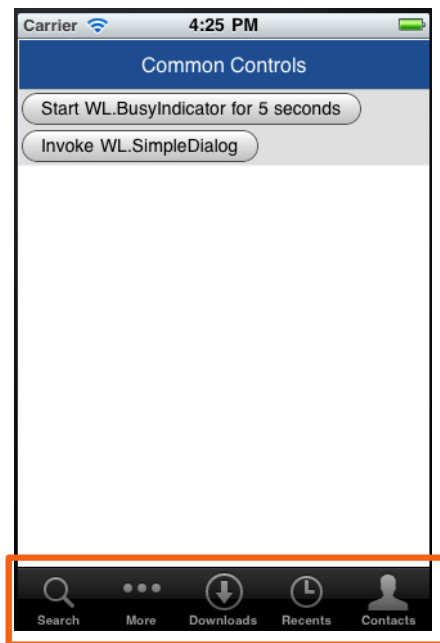


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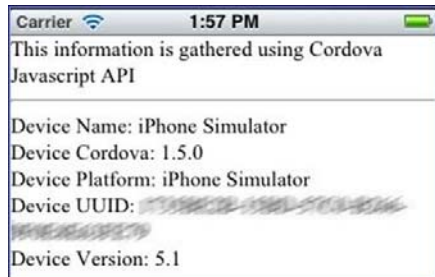
## iOS tab bars

- The tab bar navigation is one of the basic and most common principles of contemporary user interfaces.
- In the iOS applications, you can invoke a native tab bar component and set its properties by using a JavaScript API.
- Each tab can have its own icon and invoke JavaScript functions.
- The tab bar development is covered in “**Common UI Controls**” training module.



## Using Apache Cordova

- You can use the Apache Cordova framework in the iOS applications to access the native elements of a device, such as contacts, geo-location services, media services, or the accelerometer.
- The Apache Cordova development is briefly covered in “**Apache Cordova overview**” training module.



## Agenda

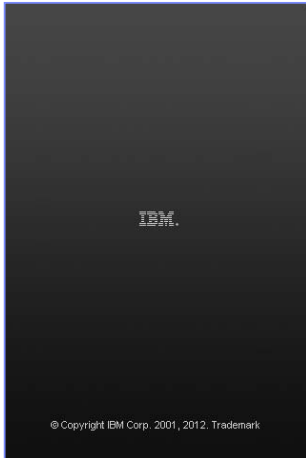
- Installation
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# Images

- According to the iOS UI Development Guidelines, the following icon sizes must be used:

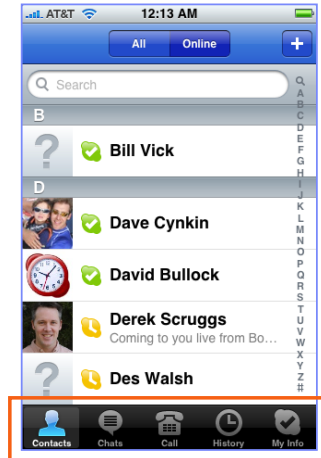
## Splash Screen

default.png  
(320 x 460)



## Tab bar images

(48 x 32)



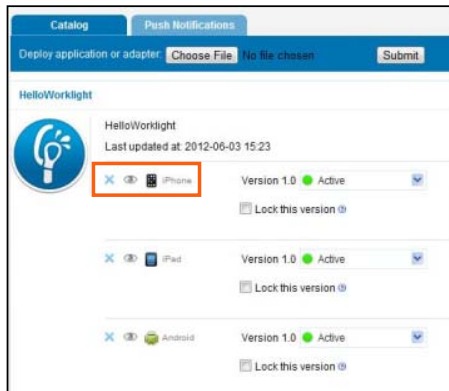
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## Debugging the application

### Phase 1: Testing in your browser

- The Worklight Console previews the iOS app in a web browser.



- Your iOS app resources are previewed in the Mobile Browser Simulator, so you are able to debug it using the facilities of the browser, such as Firebug or Developer toolbar.



# Debugging the application

## Phase 2: Testing on the iOS simulator

- Preview your application on the iOS simulator.
- Experience the “more native” feel of an application.
- Use **Xcode console** to debug your application by using the iOS simulator.



## Debugging the application

### Phase 3: Testing on an iOS Device

- To debug your iOS application on an iOS device, you first must register as a member of the iOS Developer Program.
- Enroll at **developer.apple.com**.
- Prepare and install your developer certificates and provisioning profile.
- Full details of the process can be found in the Apple developer site.
  - <http://developer.apple.com/programs/iphone/test.html>



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## ***Deployment: iPhone***

- The iOS app deployment is done through the Apple App Store:
  - Prepare your app for submission.
    - IMPORTANT: Before your build a production version of your application, make sure that the **worklightSettings** property inside your `application-descriptor.xml` file is set to **false**.
  - App Store approval process.
  - Managing apps on the App Store.

<https://developer.apple.com/iphone/appstore/>

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