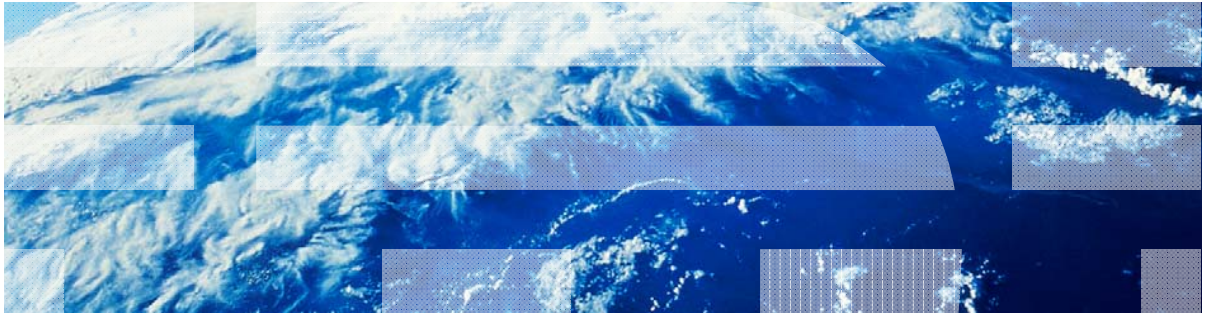


IBM Worklight V6.0.0 Getting Started

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 Information Center for instructions for committing your source code.

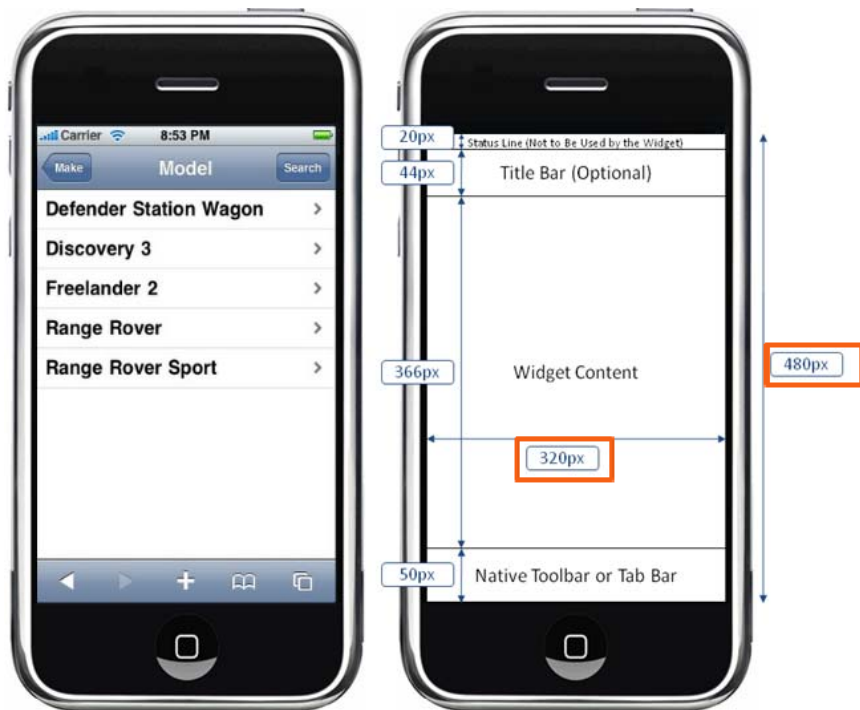
Developing for different resolutions

- iOS devices have various screen resolutions:
 - iPhone 2/3/3GS – 320 x 480
 - iPhone 4/4S – 640 x 960
 - iPhone 5 – 640 x 1136
 - iPad – 768 x 1024
- iOS assumes that the HTML file of the application is 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 (1 of 2)

- 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 (2 of 2)

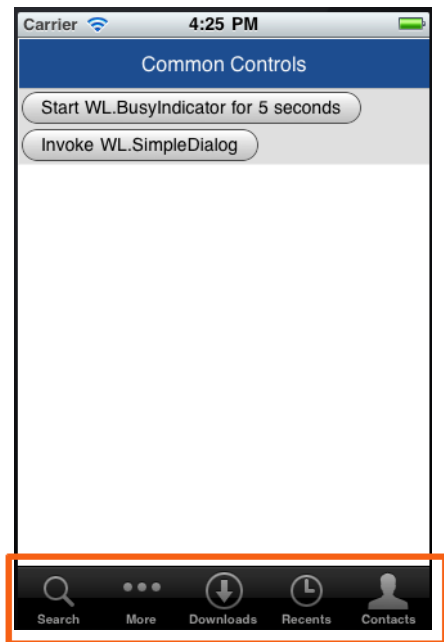


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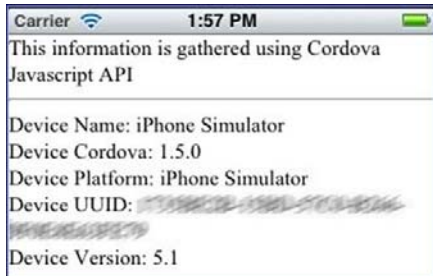
iOS tab bars

- 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.



Apache Cordova

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

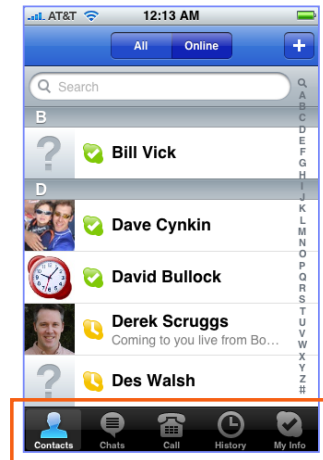
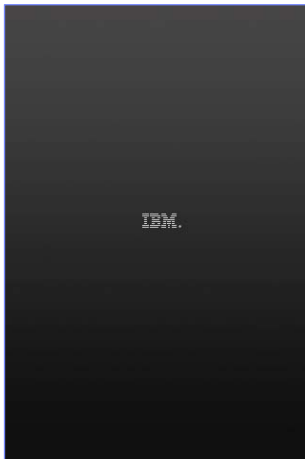


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Images

- Image file sizes differ depending on your iDevice. See the Apple iOS UI Development Guidelines for more information:
<http://developer.apple.com/library/ios/#documentation/userexperience/conceptual/mobilehig/lconsImages/lconsImages.html>



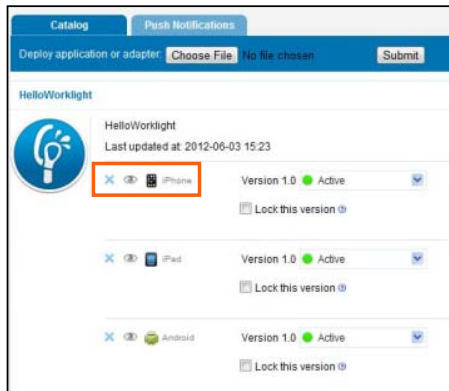
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Debugging the application (1 of 3)

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 (2 of 3)

Phase 2: Testing on the iOS simulator

- Preview your application on the iOS simulator.
- Experience a more native feel for the application.
- Use **Xcode console** to debug your application by using the iOS simulator.



Debugging the application (3 of 3)

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 you 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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