

sencha build -> ios build

Mobile Hybrid App - using IBM Worklight

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intro...

The development of mobile applications that run on many smartphones was considered a very difficult concern for mobile developers. Mobiles are different: multi-OS, multi-devices, multi-sizes, etc.,

Native execution is considered one of the best solutions to this concern.

Many companies have chosen hybrid mobile apps as a solution to this diversity in the mobile world.

advantages ...

> Hybrid mobile apps combine the benefits of native and web mobile apps, so we can develop one time using HTML5, JavaScript and CSS3, and deploy for all devices.

> Hybrid apps can access the mobile native features: Camera, Compass, Files, etc., cutting the development life cycle complexity, time and cost, and gaining the advantages of native apps.

IBM Worklight

> open, complete and advanced mobile enterprise application platform for HTML5, hybrid and native mobile applications.

> It lets developers use JavaScript, HTML5 and CSS3 to develop applications for different mobile devices.

> it also gives enterprises a set of features: version management, application center, direct update, push notification, connectivity to databases, web services and an enterprise information system.

consists of...

IBM Worklight Studio is an Eclipse based IDE, allowing developers to perform all coding, testing and integration tasks for web, hybrid or native mobile applications.

setting up

install IBM Worklight ...

> get help here ...

https://www-01.ibm.com/support/knowledgecenter/SSZH4A_6.1.0/com.ibm.worklight.installconfig.doc/devenv/t_installing_ibm_worklight_studi.html

install ADT ...

> get help here ...

<http://askubuntu.com/questions/107192/how-can-i-install-eclipse-with-the-adt-android-development-tool-on-ubuntu-11-1>

start new project in eclipse...

Open **Eclipse** and right click on **MobileFirst Development Server**, select **New**, choose **Project** and select **MobileFirst Project** from the list and click **Next**.

Enter name of project in the **Name** field and click **Next**. (here let it be , **BuildTest**)

Enter name of app in the **Application name:** field and click **Finish**. (here let it be , **BuildTest**)

Now your new project will be visible among the others and within the eclipse workspace created (let eclipse workspace be **Workspace**)among the folders in your files.

import the sencha project...

in sencha CMD, change directory to your already created sencha app location.(let app name be **BuildNow**), use command

```
:~/BuildNow $ sencha app build --destination  
../Workspace/BuildTest/apps/BuildTest/common/ package
```

```
:~/BuildNow $ sencha app build --destination  
../Workspace/BuildTest/apps/BuildTest/common/ testing
```

to know more about IBM Worklight Mobile Application Development visit >

<https://www.packtpub.com/books/content/mobile-application-development-ibm-worklight>

adding an iOS environment...

This module applies to the iPhone and the iPad environments.

Select the project and then, click the dropdown near the Create a mobilefirst artifact icon, and then select **Mobilefirst environment** to add an environment to your application.

Select the **iPhone** or **iPad** check box, and then click **Finish**.

Two folders named **iphone** and **ipad** is automatically added to your project.

review of the iOS environment folder structure...

The iphone environment includes the following folders:

- **css** – The properties that are specified in this folder override the CSS files from the common folder.
- **images** – iOS-specific images can be added in this folder. If images with the same file name exist in the common folder, they are overwritten in the iOS application.
- **js** – Contains JavaScript™ that can extend, and override if required, JavaScript from the common folder.
- The **native** folder under the folder contains automatically generated **app code**.
- The **nativeResources** folder under the folder contains resources that are used by the native code.

previewing your application with the Mobile Browser Simulator...

Once your application is built and deployed in Worklight Studio, you can preview it in the Mobile Browser Simulator.

Right-click the **project** and select **Open Mobilefirst Console**.

The Mobile Browser Simulator (MBS) can be used to preview your application with different device skins.

transferring your application to Xcode...

The Eclipse IDE does not support iOS application development. Therefore, your application needs to be transferred to **Xcode**, the Apple native IDE.

If you are running a **Mac version of Eclipse**, right-click the **iPhone** or **iPad** environment folder and select **Run As > Xcode project**. The Worklight plugin automatically opens Xcode for you.

If you are running a **Windows version of Eclipse**, manually compress the native folder and copy it to your Mac machine.

running your application in the iOS Simulator...

If you transferred your app from Windows, double-click the **project file**(.xcodeproject) to open it in the **Xcode IDE**.

Click the **Play** button to preview your application in the **iOS Simulator**.

generating .ipa of project in xcode...

Select the project in **xcode** and in **Product** dropdown in toolbar, select **Clean**.(Make sure that **iOS Device** is selected in the dropdown to build for)

Select **Product** from the top menu and then click **Archive**.

After build is complete you will be presented with a screen, select the build to be distributed and then click **Distribute**.

Then you will be presented with a screen to select the modes to distribute. It includes

-
- > Submit to iOS App Store.
 - > Save for Enterprise or Ad Hoc Deployment.
 - > Export as Xcode Archive.

for generating **.ipa** file select second option(Save for Enterprise or Ad Hoc Deployment) and click **Next**.

Choose the correct provisioning file for the developer account and then click **Export**.

In the next screen select a **location to save** the **.ipa** file and select **save** button.

This will save the .ipa file to your desired location.

method to install .ipa file (app) on iPhone / iPad...

online method - using **diawi.com** (<https://www.diawi.com/>)

Diawi is a tool for iOS developers to deploy applications or install them directly to the device.

1. open diawi.com
2. Upload the application.(.ipa or .zip)
3. Send the link to your testers, clients, friends or even use it yourself.
4. Open the link in **Safari** on the iOS device and click on **install**, this will download the app
in the device and can be run.