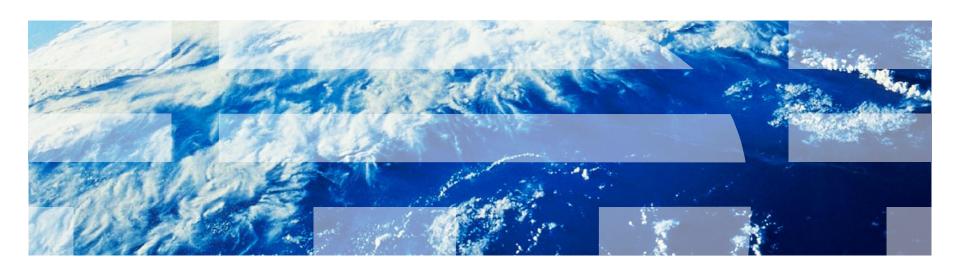


# IBM Worklight Foundation V6.2.0 Getting Started

### Supporting multiple form factors using Worklight skins





#### **Trademarks**

- IBM, the IBM logo, ibm.com, and Worklight are trademarks or registered trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.
- Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.
- Other company products or service names may be trademarks or service marks of others.
- This document may not be reproduced in whole or in part without the prior written permission of IBM.

#### **About IBM®**

See <a href="http://www.ibm.com/ibm/us/en/">http://www.ibm.com/ibm/us/en/</a>



# Agenda

- What are skins?
- How do skins work?
- Exercise



### Skins

- Skins provide support for multiple form factors in a single executable file for devices of the same OS family.
- Skins are a subvariant of an environment.
- Skins are packaged together in one app.
- The decision on which skin to use is made automatically at run time.



### Skin use cases

Different Screen Sizes





Different Screen Densities





Different Input Methods





Support for HTML5

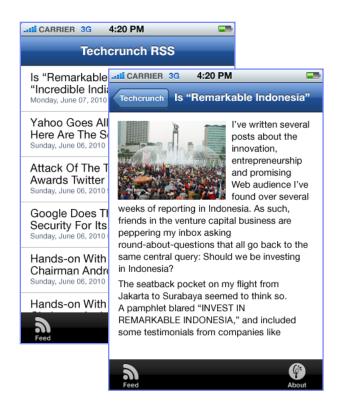






# Example: Substantially different screen sizes

(iPhone versus iPad)







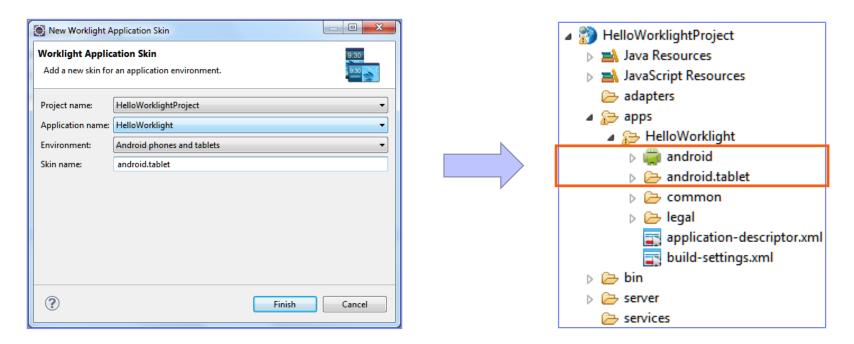
# Agenda

- What are skins?
- How do skins work?
- Exercise



#### Skin creation

- Skins are created by using the Worklight® Application Skin wizard.
- The skins are placed in directories that are next to the corresponding environment directory.
- Before a skin can be added, first add the environment for which you want to create the skin.





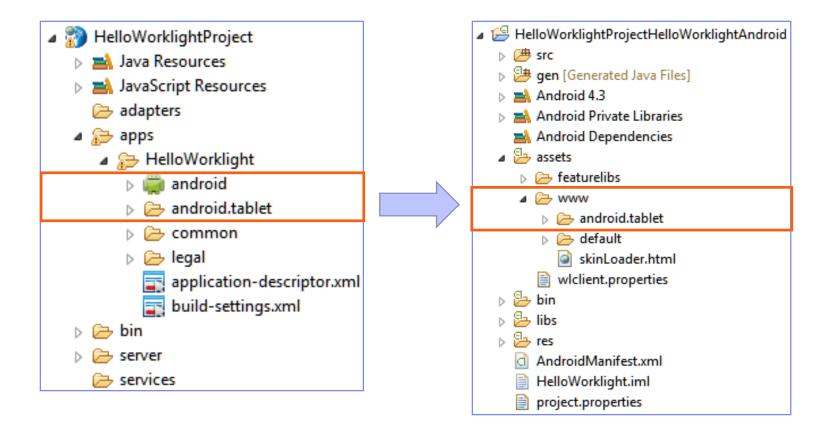
### Skin creation

- A skin folder contains the following folders: images, CSS, and JavaScript™.
- Create new .css and .js files in the corresponding folders.
- Filenames:
  - To extend existing code and styling from the default skin, use the same filenames as those of the default skin.
  - To create new code and styling, use different filenames than those in of the default skin. When you choose this option, you need to copy the HTML file to the skin folder. You must also change the reference to the .js and .css files in the HEAD element of the HTML file.



# Skin packaging

All skins for a specific environment are packaged within the app.

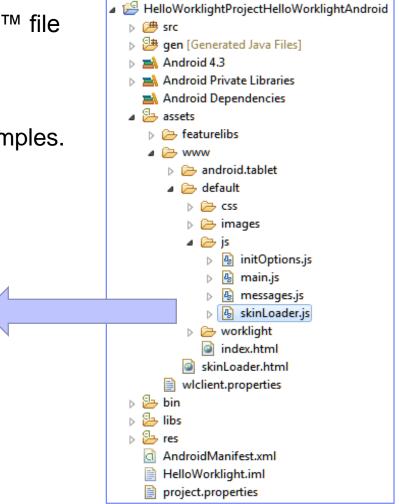




# Applying skins at run time

- A special, developer-controlled JavaScript<sup>™</sup> file is run at app startup.
- It determines which skin to load.
- The default skinLoader.js contains samples.

```
function getSkinName() {
   var skinName = "default";
   if (getVersion () == "2.2" ||
       getVersion () == "2.1") {
       skinName = "android.HTML5";
   }
   return skinName;
}
```





# Skin Registration

- Skins are automatically registered in application-descriptor.xml.
- Registration determines the ordering of hierarchy between the common folder, environment, and skin.
- If you remove a skin from the project, application-decsriptor.xml
   must be manually modified.

```
<android>
    <skins>
        <skin name="default">
            <folder name="common"/>
            <folder name="android"/>
        </skin>
        <skin name="android.phone">
            <folder name="common"/>
            <folder name="android"/>
            <folder name="android.phone"/>
        </skin>
        <skin name="android.tablet">
            <folder name="common"/>
            <folder name="android"/>
            <folder name="android.tablet"/>
        </skin>
    </skins>
</android>
```



# Agenda

- What are skins?
- How do skins work?
- Exercise



#### **Exercise**

- Create an Android app with a skin: "Modified"
- The modified skin changes the color of the text.
- Toggle skinLoader.js code to change between skins.

```
* skinLoader.js 

* override this function

* See examples below.

*/

function getSkinName() {

return "default";

}

skinLoader.js 

* override this function to ref

* See examples below.

*/

function getSkinName() {

return "android.Modified";

// return "default";

}
```



#### **Notices**

- Permission for the use of these publications is granted subject to these terms and conditions.
- This information was developed for products and services offered in the U.S.A.
- IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.
- IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:
  - IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785
     IJS A
- For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:
  - Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan Ltd.
     1623-14, Shimotsuruma, Yamato-shi Kanaqawa 242-8502 Japan
- The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.
- This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.
- Any references in this information to non-IBM Web sites are provided for convenience only and do not in
  any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of
  the materials for this IBM product and use of those Web sites is at your own risk.
- IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.
- Licensees of this program who wish to have information about it for the purpose of enabling: (i) the
  exchange of information between independently created programs and other programs (including this one)
  and (ii) the mutual use of the information which has been exchanged, should contact:
  - IBM Corporation
     Dept F6, Bldg 1
     294 Route 100
     Somers NY 10589-3216
     USA

- Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.
- The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.
- Information concerning non-IBM products was obtained from the suppliers of those products, their
  published announcements or other publicly available sources. IBM has not tested those products and
  cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.
  Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

#### COPYRIGHT LICENSE:

- This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute hese sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.
- Each copy or any portion of these sample programs or any derivative work, must include a copyright notice
  as follows:
  - © (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs.
     © Copyright IBM Corp. enter the year or years. All rights reserved.

#### **Privacy Policy Considerations**

- IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information about this offering uses cookies is set forth below.
- Depending upon the configurations deployed, this Software Offering may use session cookies that collect session information (generated by the application server). These cookies contain no personally identifiable information and are required for session management. Additionally, persistent cookies may be randomly generated to recognize and manage anonymous users. These cookies also contain no personally identifiable information and are required.
- If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent. For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at <a href="http://www.ibm.com/privacy">http://www.ibm.com/privacy</a> and IBM's Online Privacy Statement at <a href="http://www.ibm.com/privacy/details">http://www.ibm.com/privacy/details</a> the sections entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at <a href="http://www.ibm.com/software/info/product-privacy">http://www.ibm.com/software/info/product-privacy</a>.



# Support and comments

- For the entire IBM Worklight documentation set, training material and online forums where you can post guestions, see the IBM website at:
  - http://www.ibm.com/mobile-docs

#### Support

- Software Subscription and Support (also referred to as Software Maintenance) is included with licenses purchased through Passport
  Advantage and Passport Advantage Express. For additional information about the International Passport Advantage Agreement and the
  IBM International Passport Advantage Express Agreement, visit the Passport Advantage website at:
  - http://www.ibm.com/software/passportadvantage
- If you have a Software Subscription and Support in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. For additional details, consult your IBM Software Support Handbook at:
  - http://www.ibm.com/support/handbook

#### Comments

- We appreciate your comments about this publication. Please comment on specific errors or omissions, accuracy, organization, subject
  matter, or completeness of this document. The comments you send should pertain to only the information in this manual or product and
  the way in which the information is presented.
- For technical questions and information about products and prices, please contact your IBM branch office, your IBM business partner, or your authorized remarketer.
- When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes
  appropriate without incurring any obligation to you. IBM or any other organizations will only use the personal information that you supply
  to contact you about the issues that you state.
- Thank you for your support.
- Submit your comments in the IBM Worklight Developer Edition support community at:
  - https://www.ibm.com/developerworks/mobile/worklight/connect.html
- If you would like a response from IBM, please provide the following information:
  - Name
  - Address
  - Company or Organization
  - Phone No.
  - Email address



## Thank You

