Hybrid applications client-side API basics

 Download MobileFirst project (https://github.com/MobileFirst-Platform-Developer-Center/ClientSideAPI/tree/release71)

Overview

This tutorial lists basic client-side API methods used to develop hybrid applications. The accompanying sample application demonstrates using a small subset of the methods.

Prerequisite: To complete this tutorial, you must have previous experience with web development technologies such as HTML, CSS, JavaScript, and DOM events and manipulations. To learn these technologies, visit http://www.w3schools.com/ (http://www.w3schools.com/).

Although not required, a basic knowledge of jQuery and object-oriented JavaScript libraries is an advantage.

This tutorial covers the following topics:

- The WL namespace
- Sample application

The WL namespace

The WL namespace is used to invoke MobileFirst APIs: WL.Client, WL.App, WL.SimpleDialog and so on.

The WL namespace exposes API objects, methods, and constants (usually enums).

The WL namespace is made available in the application by referencing worklight.js in index.html. This is done automatically by MobileFirst Studio or CLI when the application is generated.

WL.Client

With WL.Client you can perform the following type of tasks.

Additional API methods are available in the API reference for WL.Client in the user documentation

Initialize and reload the application

- WL.Client.init(onSuccess, onFailure, timeout, ...)
- WL.Client.reloadApp()

Trigger login and logout

- WL.Client.login(realm, options)
- WL.Client.logout(realm, options)

Obtain general app information

- WL.Client.getEnvironment()
- WL.Environment.ADOBE AIR
- ...

Retrieve and update data from corporate information systems

- WL.Client.invokeProcedure (invocationData, options) for environment that do not support REST API
- WLResourceRequest (request URL, request type)

Store and retrieve user preferences across sessions

- WL.Client.setUserPref(key, value, options)
- WL.Client.setUserPrefs({key1:value1, ...}, options)
- WL.Client.getUserPref(key)
- WL.Client.deleteUserPref(key, options)
- WL.Client.hasUserPref(key)

Specify environment-specific user interface behavior

- WL.App.openURL
- WL.App.getDeviceLanguage
- WL.App.getDeviceLocale
- WL.BusyIndicator
- WL.TabBar
- WL.SimpleDialog
- WL.OptionsMenu
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Store custom log lines for auditing and reporting purposes in special database tables

WL.Client.logActivity(activityType)

Note: This method is deprecated in V7.0. Use WL.Logger instead.

Write debug lines to a logger window (for example: Chrome's Dev Tools console)

WL.Logger.debug

WL.Logger

WL.Logger helps you troubleshoot errors in environments that have no debugging tools.
WL.Logger outputs to an environment console, such as Xcode console, Adobe AIR, Android LogCat, Chrome Dev Tools, and similar tools.

Sample application

Click to download (https://github.com/MobileFirst-Platform-Developer-Center/ClientSideAPI/tree/release71) the MobileFirst project.