Browser Simulator User's Guide

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Objective

This document is a user's guide for the Browser Simulator, a tool for developers interested in integrating "Open in Chrome" in their iOS apps that will help in testing and debugging this feature on the iOS Simulator.

The Browser Simulator should never be installed on iOS Devices since it will collide with the same URL Schemes registered by the actual Google Chrome app. The Browser Simulator should only be used in early development stage to test the "Open in Chrome" feature in the iOS Simulator.

For a detailed description of how to integrate "Open in Chrome" please refer to: https://docs.google.com/a/google.com/document/d/1nQRz0WAtEagZ7_lH01IGgP19s2IU_mpyGljdHOUs3pA/view

Browser Simulator

The Browser Simulator project can be downloaded from the "Open in Chrome" project page: https://code.google.com/a/google.com/p/openinchrome/. Once downloaded the project can be compiled and installed on the iOS Simulator using any iOS SDK version 5.1 or above.

On first run the Browser Simulator doesn't show any information. This is perfectly normal since the purpose of this app is to behave like Chrome would when called by a third party app to open a web page. For this reason the Browser Simulator will register to all the URL Scheme that the actual Google Chrome app would use:

- **googlechrome**
- **googlechromes**
- **googlechrome-x-callback**

NOTE: It is highly discouraged to install the Browser Simulator on actual device. The best way to test the "Open in Chrome" functionality is by using the real Chrome app. The Browser Simulator is provided to allow testing also in the iOS Simulator where Google Chrome cannot be installed from the Apple AppStore. The reason is that iOS doesn't handle correctly clashes in URL Scheme and the Browser Simulator would replace all the URL Scheme of the real Google Chrome app and once removed from the system it's undefined what the behaviour for those URL Scheme will be. This is a known problem of iOS.

When an app invokes one of the Chrome URL Schemes, the Browser Simulator starts up showing a preview of the actual web page loaded at the provided URL with an optional back

button in case the **googlechrome-x-callback** scheme is used (see [Open in Chrome with x-callback-url]).

In the sample screenshot above, Browser Simulator was invoked by an app called SimBrowser, using x-callback-url with a valid callback URL and this means that Chrome will show a back button to return to the calling application.

Tapping on the "Info" button on the top right, shows all relevant information like:

- The Full URL received.
- The URL Scheme used.
- An indication of whether or not the received URL is compliant with the x-callback-url specification.
- The URL to open
- The name of the calling app.
- The CallbackURL.
- The status of the create-new-tab flag.

The Browser Simulator doesn't implement tabbed browsing like the real Google Chrome app does so the create-new-tab flag is only displayed in the detail information but doesn't have any visual impact on the Browser Simulator.

The address bar on the Browser Simulator is just for information purposes and cannot be used to change the current page displayed.