Survey on Privacy Implementations
in HTML5 Mobile Apps

Nicholas Smith
CS 578 Privacy In a Networked World
Professor S. Wetzel

4 February 2014

The popularity of HTML5 has begun shifting a shift in the mobile market. With the current major platforms taking their own approach to app programming, it is appealing for users and developers to embrace Open Web standards and harness the power of HTML5 as an app platform. Companies like Mozilla and Google are pioneering Open APIs that bring native hardware functionality to the web and make it possible for web sites to control hardware such as a phone's vibration motor, emit native notifications or even the ability to place phone calls through a javascript API.

While this approach has many practical advantages, it introduces a new privacy model for mobile platforms[1]. We have become accustomed to this model on the desktop and in our browser, but the tighter integration on these devices exposes more of our personal data in the same API. I believe it is important to explore the developments into HTML5 as an app platform and study how web-based platforms such as Mozilla's Firefox OS[2] or Google's Chrome Apps[3] differ from existing technologies like Google's Android or Apple's iOS.

Personally, I am a supporter of HTML5 as an app platform for a number of other reasons, but I would like to take an opportunity to study how the web security model impacts privacy on a mobile device. Some specific areas that I would like to explore are inter-app communication (how data is shared between apps), what information is made available to an app through the operating system and how permissions to access our private data are handled by each of the leading implementations. Embracing the Open Web as a platform is a victory for freedom, but exposing our private data via web APIs has potential to reveal information more easily.

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[1] https://developer.mozilla.org/en-US/Firefox_OS/Security/Security_model. Example of a platform security model for Mozilla's Firefox OS

[2] https://www.mozilla.org/en-US/firefox/os/

[3] https://developer.chrome.com/apps/about_apps.html/