Web Application Developer's Guide

Overview

The Fire phone introduces new one-handed shortcuts that utilize user motions and head movements to interact with mobile content. These shortcuts belong to set of APIs called MotionGestures API.

This document briefly describes these one-handed shortcuts and provides an overview of how to get started developing for the Fire phone.

The target audience for this document is web application developers who want to develop apps for the Fire using these new APIs.

Setting up your environment

Cordova

For a hybrid application that will use the MotionGestures APIs you will need to create your project with Apache Cordova for Amazon FireOS, and then install the appropriate plugin.

Detailed information about setting up Cordova can be found in the "*Using Cordova plugins*" document, and online:

http://cordova.apache.org/docs/en/3.5.0/guide_platforms_amazonfireos_index.md.ht ml

Hosted Web Application

For hosted applications that do not use Cordova you **must** include the Amazon Web API script reference in your HTML document:

<script src="http://resources.amazonwebapps.com/v1/latest/Amazon-Web-AppAPI.min.js"></script>

Note: You may require using HTTPS instead of the above HTTP if you plan on using Amazon's In-App Purchasing. For more information on Amazon IAP please look at Amazon developer portal:

developer.amazon.com -> Kindle -> APIs -> In-App Purchasing

The Web App Tester is available for download from Amazon. You can shop for the Web App Tester from your Kindle Fire device, from Amazon.com on your computer, or by downloading the app to your Android device.

Detailed instructions on installing Web App Tester can be found here: https://developer.amazon.com/public/solutions/platforms/webapps/docs/tester.html To test your application, simply install the Web App Tester on your Fire phone and enter the URL of your hosted application.

Application Lifecycle

Currently all of your API usage code must be used after there has been an event fired from the Amazon HTML5 Framework. The event that is fired differs based on the type of application you are building.

Cordova Applications: These applications built by developers rely on using the *deviceready* event.

Hosted Applications: These applications built by developers rely on using the *amazonPlatformReady* event.

For more information on these events and how they should be used, please refer to the individual API Documents.

Dynamic Perspective and One-Handed Shortcuts

This section briefly describes APIs that are currently available through the Fire Phone SDK. Detailed information can be found in the "Using One-Handed Shortcuts" and the "Using Head Tracking" documents.

One-Handed Shortcuts

One-handed shortcuts use four Dynamic Perspective sensors to track the X, Y and Z coordinates of the user's head position.

Head Tracking

The head tracking gives you access to the tilt and peek events. Tilt and peek events are results of the user tilting or slightly rolling the device in any direction (front, back, left or right).

UI Controls

The Fire phone has a number of signature UI controls and widgets, which can be controlled or replicated for use in or with your web application. Available UI controls are described briefly below, but detailed information can be found in the "Implementing Side Panels" and "Using App Widget" documents.

Side Panels

Side panels are hidden panels on the left and right side of the device screen. These panels can display things such as navigation or informational items. As a web

developer, you can add panels to your app that look and behave similarly to those in Fire phone UI.

App Widget

On the Fire, your app icon will appear in the main UI carousel. Below the icon is the app widget, which is a combination of images and text that allow you to show contextual information to your users. Additionally, users can open the application in a unique state by interacting with the items in the app widget.