Google™
11
I/O

Android Development Tools

Xavier Ducrohet
Tor Norbye
May 11, 2011

Twitter: @droidxav @tornorbye #io2011 #android
Give presentation feedback: goo.gl/vvwzc
Questions: goo.gl/mod/jY8n

Agenda

- New features from the past 3-6 months
- Features you may not know about
- Best practices
- Upcoming features preview

Introduction

- Developed in the open
  - tools.android.com
- Allow working in any environment
  - Any OS: Windows, Mac OS X, Linux
  - Any IDE: Eclipse, IntelliJ, NetBeans
  - Command line too! Useful for automated builds.
- But, we can't provide the same level of support for every IDE
- Eclipse is main priority for advanced features
- Command line always supported with Ant and standalone tools (DDMS, Traceview, HierarchyViewer)
- Structure our code to make it easy for third-party tools vendors to build on our code base

Eclipse Integration

- If you know Eclipse, you know how to use ADT
- Provides basic Project, Build, Launch, Debug features
- Custom editors for all the Android-specific XML files
- Integrate the standalone tools into Eclipse
  - AVD and SDK Manager
  - DDMS
  - Traceview
  - HierarchyViewer
  - Draw 9 Patch (not yet)

Advanced Editors

- Many different XML files
- Form-based editors
- XML text editors
  - Content Assist
  - Quick fixes
  - Quick assist
- WYSIWYG editors

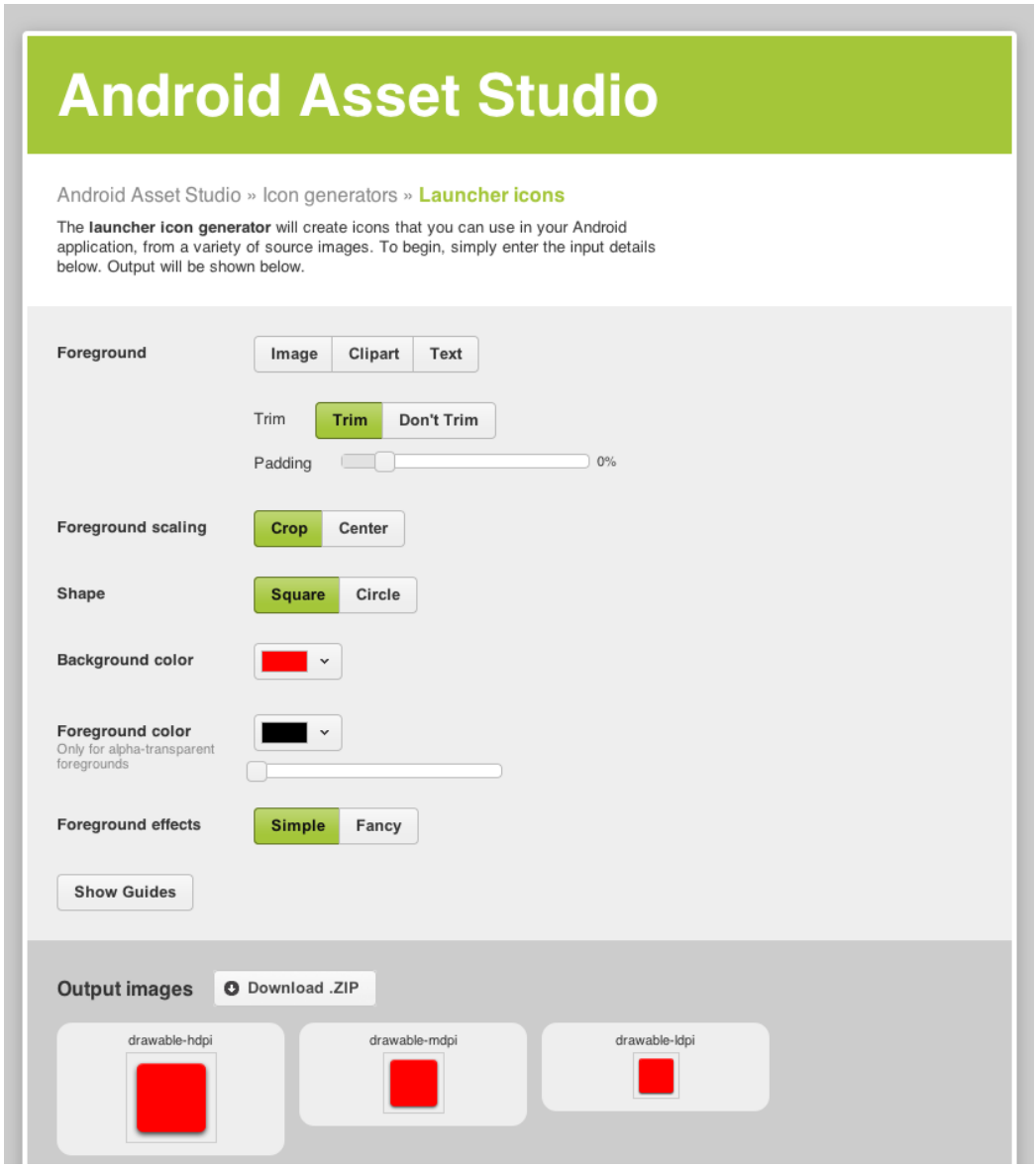
Improved Layout Rendering

- One rendering library per platform version
- Running (most of) the Android View framework in Eclipse
- Improved in 3.0 and even more in 3.1
  - More advanced drawing support
  - Better Custom View support
  - New API for better interactivity
  - Will back port to 2.x

Tools Walkthrough

Other Design Tools

- Android Asset Studio: http://j.mp/androidassetstudio



Talk: Memory Management for Android apps

- 4:15pm - 5:15pm, Wed (today!)
- Room 9

Emulator Status

- Emulates a full ARM device
  - Not a compatibility layer on top of host OS/CPU
- Runs ARM code, interpreted into x86
  - Slow but OK
- Software GL renderer
  - Compiled into ARM machine code
  - Very slow in tablet screen resolutions

Open Source

- Developed entirely in the open.
- Project site: tools.android.com
- Source: source.android.com
- Bug Database: b.android.com
- Code Reviews: r.android.com
- Mailing List: adt-dev@googlegroups.com

Links

- Twitter: #Android #io2011
- Give presentation feedback
  - goo.gl/vvwzc
- Ask questions using Google Moderator
  - goo.gl/mod/jY8n