

User Interaction: Intro to Android

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A brief history of Android

- Originally an independent startup that “developed software for mobile phones”
- Business Week quote from founder Andy Rubin in 2003:
 - "Rubin said there was tremendous potential in developing smarter mobile devices that are more aware of its owner's location and preferences.

What is Android?

- “Android is a software stack for mobile devices that includes an operating system, middleware and key applications. The Android SDK provides the tools and APIs necessary to begin developing applications on the Android platform using the Java programming language.”

The word "ANDROID" in a stylized, blue, sans-serif font.

A brief history of Android

- iPhone launched in 2007



A brief history of Android

- Rumors of the “gPhone” started about the time the iPhone launched in 2007



gPhone concepts



A brief history of Android

- Rumors of the “gPhone” started about the time the iPhone launched
- Google dropped the bomb on 11/5/2007
 - It wasn't working on a handset
 - It was working on an operating system
 - to compete with Microsoft, Symbian, telephone companies. Who else ?



A brief history of Android

- Why would Google do this?
 - It doesn't want to be locked out of mobile advertising
 - It's the same reason they supported Firefox
 - It's the same reason they built Chrome
 - It's the same reason they bought YouTube
 - It's about maintaining access to advertising channels today, and having access to tomorrow's innovations
 - Competitors don't need to let Google advertise



A brief history of Android

- Actually it wasn't just Google
- It was the Open Handset Alliance (OHA)
 - including HTC, LG, Samsung, T-Mobile and more
 - pushing
- Based on Linux
 - optimized for mobile devices



A brief history of Android

- The architecture is highly modular
 - “Location” can come from many places
 - Text messaging handling can be done by any software component
- It is predominantly open-source
- It is predominantly Java-based



A brief history of Android



What would it take to build a better mobile phone?

A commitment to openness, a shared vision for the future, and concrete plans to make the vision a reality.

Welcome to the Open Handset Alliance™, a group of 47 technology and mobile companies who have come together to accelerate innovation in mobile and offer consumers a richer, less expensive, and better mobile experience. Together we have developed Android™, the first complete, open, and free mobile platform.

We are committed to commercially deploy handsets and services using the Android Platform.

- **Develop Android applications:** [Get the SDK](#)
- **Contribute to the Android Open Source Project:** [Get the source code](#)

<http://www.openhandsetalliance.com>

- <http://www.youtube.com/watch?v=7Y4thikv-OM>



A brief history of Android

- First SDK was released on 11/12/2007
- Main conceptual competitor is LiMO
 - Linux for Mobile
 - Verizon and Mozilla key initial players
 - Many partners in both projects
 - Outside Asia, no one cared



A brief history of Android

- 6/24/2008 Nokia announces purchase of Symbian from Sony Ericsson in response
- starts the Symbian Foundation to open-source their main platform, gets released in 2011 as “shared-source”
- 10/21/2008, Google puts all of Android into open source using the Apache License
- 12/9/2008 Sony Ericsson joins the OHA
- Google denies rumors of the gPhone at the same time

A brief history of Android

- 8/12/2010 Oracle sues Google over intellectual property in Java
- 2/11/2011 Nokia announces it is abandoning Symbian for Windows 7
- From 2011 - 2013 Nokia fell from the #1 smart phone maker to #10
- 9/2/2013 Microsoft begins purchase of Nokia's phone business

<http://www.engadget.com/2008/06/24/nokia-buys-symbian/>

<http://www.gartner.com/newsroom/id/2482816>

Overview of Android

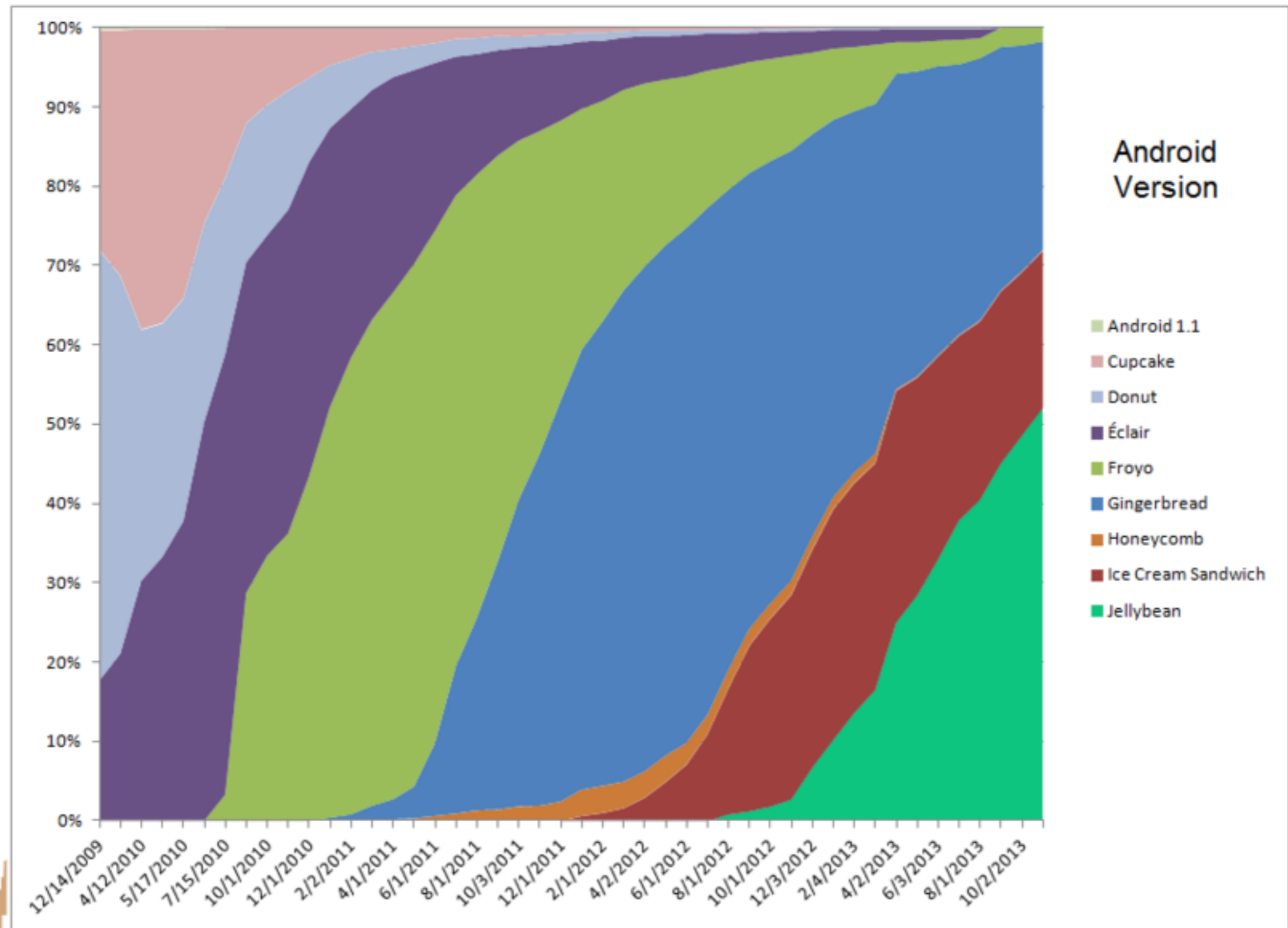
- Platforms running Android
 - in 2009
 - T-Mobile G1 phone
 - HTC developer phone
 - in 2011
 - Hundreds
 - in 2013
 - Silly

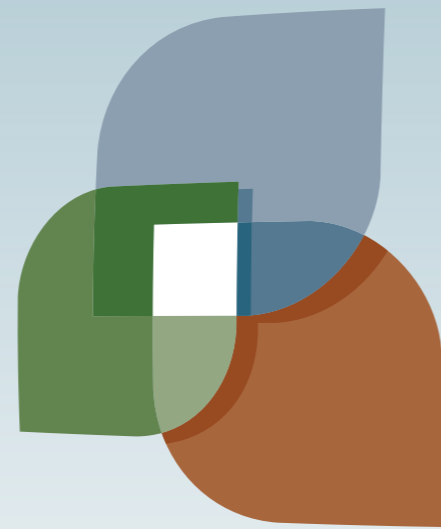


Overview of Android

- Various code revisions are named after pastries (sort of)
 - Cupcake (released on 4/30/2009) v1.5
 - Donut (released on 9/15/2009) v1.6
 - Eclair (released on 10/26/2009) v2.1
 - Froyo (released on 5/20/2010) v2.2
 - Gingerbread (?) v2.3 (SIP, NFC)
 - Honeycomb (5/2011) v3.0 (tablet)
 - Ice Cream Sandwich (11/14/2011) v4.0 (face recognition)
 - Jelly Bean (11/13/2012) v4.2 (Google Now)
 - KitKat (9/3/13) v4.4 (experimental runtime "ART")

Intro to Android





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