Ahmed Ali
Big fan of Android
Mobile Operating Systems

What is your Mobile OS?
What is your opinion about it?
Why you are using it?
Do you know any other OSs??
Mobile Operating Systems
Hello Android!

1 - What is "Android"?
2 - Android History
3 - Android Versions
4 - Android Market
5 - Why Android?!!
6 - Data synchronization
7 - Developer Tools
What is Android?

Android is an open-source software stack for mobile devices that includes an operating system, middleware and key applications. And it is based upon a modified version of the Linux kernel.
Android

How many lines of code in Android ??

12 Million Lines
Including

3 Million Lines “XML”
2.8 Million Lines “C” Core
2.1 Million Lines “Java” UI
1.75 Million Lines “C++”
Open handset alliance

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      • Fifth level
Google Inc. purchased the initial developer of the software in 2005 from Android Inc. which was founded in Palo Alto, California, United States in October, 2003 by Andy Rubin, Rich Miner.
system-architecture

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What is That !!!

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Android Platform

Android 1.5  CupCake
Android 1.6  Donut
Android 2.1  Eclair
Android 2.2  Froyo
Android 2.3  Gingerbread
Android 3.0  Honeycomb, Tablet Oriented
Some statistics

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- Fourth level
- Fifth level

<table>
<thead>
<tr>
<th>Platform</th>
<th>API Level</th>
<th>Distribution</th>
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<tbody>
<tr>
<td>Android 2.2</td>
<td>2</td>
<td>69.0%</td>
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<tr>
<td>Android 2.1</td>
<td>7</td>
<td>27.0%</td>
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<tr>
<td>Android 2.0</td>
<td>8</td>
<td>3.5%</td>
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<tr>
<td>Android 1.6</td>
<td>10</td>
<td>0.1%</td>
</tr>
<tr>
<td>Android 1.5</td>
<td>11</td>
<td>0.0%</td>
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</table>
Android No.1 in USA

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<table>
<thead>
<tr>
<th>Top Smartphone Platforms</th>
<th>Share (%) of Smartphone Subscribers</th>
<th>Point Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total U.S. Smartphone Subscribers Ages 13+</td>
<td>100.0%</td>
<td>100.0%</td>
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<tr>
<td>Google</td>
<td>23.5%</td>
<td>31.2%</td>
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<tr>
<td>RIM</td>
<td>35.8%</td>
<td>30.4%</td>
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<tr>
<td>Apple</td>
<td>24.6%</td>
<td>24.7%</td>
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<tr>
<td>Microsoft</td>
<td>9.7%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Palm</td>
<td>3.9%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>
Smartphone market share
March '11, Nielsen Mobile Insights, National

- Android OS: 37%
- Apple iOS: 27%
- RIM BlackBerry OS: 22%
- Microsoft Windows Mobile / WP7: 10%
- Symbian OS: 2%
- Palm / WebOS: 3%

Source: The Nielsen Company.
Smartphone market share - recent acquirers

March '11, Nielsen Mobile Insights, National

- Android OS: 50%
- Apple iOS: 25%
- RIM BlackBerry OS: 15%
- Microsoft Windows Mobile / WP7: 7%
- Palm / Web OS: 2%
- Symbian OS: 1%

Source: The Nielsen Company.
According to data from Android apps site Androlib, 3,738,365,177 apps have been downloaded from the Android market. That’s quite an impressive number. That means that 125 Android apps are downloaded every second.
Android Market

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  • Fifth level
Android Market

Market Is Divided into Two Parts
1 - Phone Market
2 - Web Market
Phone Based Market

- YouTube
- Kids Connect the Dots
- Angry Birds Seasons
- SkyGrid
- Justin.tv Broadcaster
- Picasa Tool Pro
- Flash Player 10.1
- LauncherPro
- ShootMe (Screen Gr)
- Screenshot It Trial
- Gmail

Updates
Keep this application up to date automatically.

Allow automatic updating

My review
Let others know what you think of this application.

My rating

- Third level
- Fourth level
- Fifth level
Desktop Based Market

●

Second level

● Third level

● Fourth level

● Fifth level
Android Market

- $25 Registration Fee for Developer
- Developer receive 70% of Each Sale
- Remaining amount Goes to carriers
- Google Doesn’t Take any percentage
- Website : www.market.android.com
Why Android ?!

1 – Open Source
2 – Flash Player Support
3 – Different Models
4 – Reasonable prices
5 – Google Apps
6 – Android Apps
Data Synchronization

- How do I sync my calendar data?
- How do I sync my contacts?
- Does Google offer anything like MobileMe?
Data Synchronization

“the best way to synchronize these various pieces of information is to let the device do it on its own while you're not looking”

so, you never have to think about it Once you've logged into your Google account on an Android-powered phone it automatically synchronizes all your contacts and Gmail information so everything is always available”
Development Tools

- Java Language
- Eclipse IDE
- ADT Plug-in For Eclipse
- Android SDK
Android SDK

Consist of the following parts:

- Android Emulator
- Command line tools
- Documentations.
- example Applications.
Your First App “Hello World”
Install Eclipse then Install ADT Plug-in
Download Android SDK and install it
Now, Create your First App
Let’s Create Our 1st App

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## Summery

<table>
<thead>
<tr>
<th>Company</th>
<th>Programmed in</th>
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<tbody>
<tr>
<td>Google inc.</td>
<td>C(core), C++, (some third party apps), java (UI)</td>
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<table>
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<tr>
<th>Initial release</th>
<th>Kernel Type</th>
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<tr>
<td>2008</td>
<td>Monolithic (modified Linux kernel)</td>
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<table>
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<th>Latest stable release</th>
<th>Developer</th>
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<td>2.3.3</td>
<td>Open Handset Alliance</td>
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<th>Website</th>
<th>Developing language</th>
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<td>Android.com</td>
<td>Java</td>
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<tr>
<th>Market</th>
<th>Developing Tools</th>
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Resources

Wikipedia

Android Developer