



Bubbles!
and a quick look at Google Android

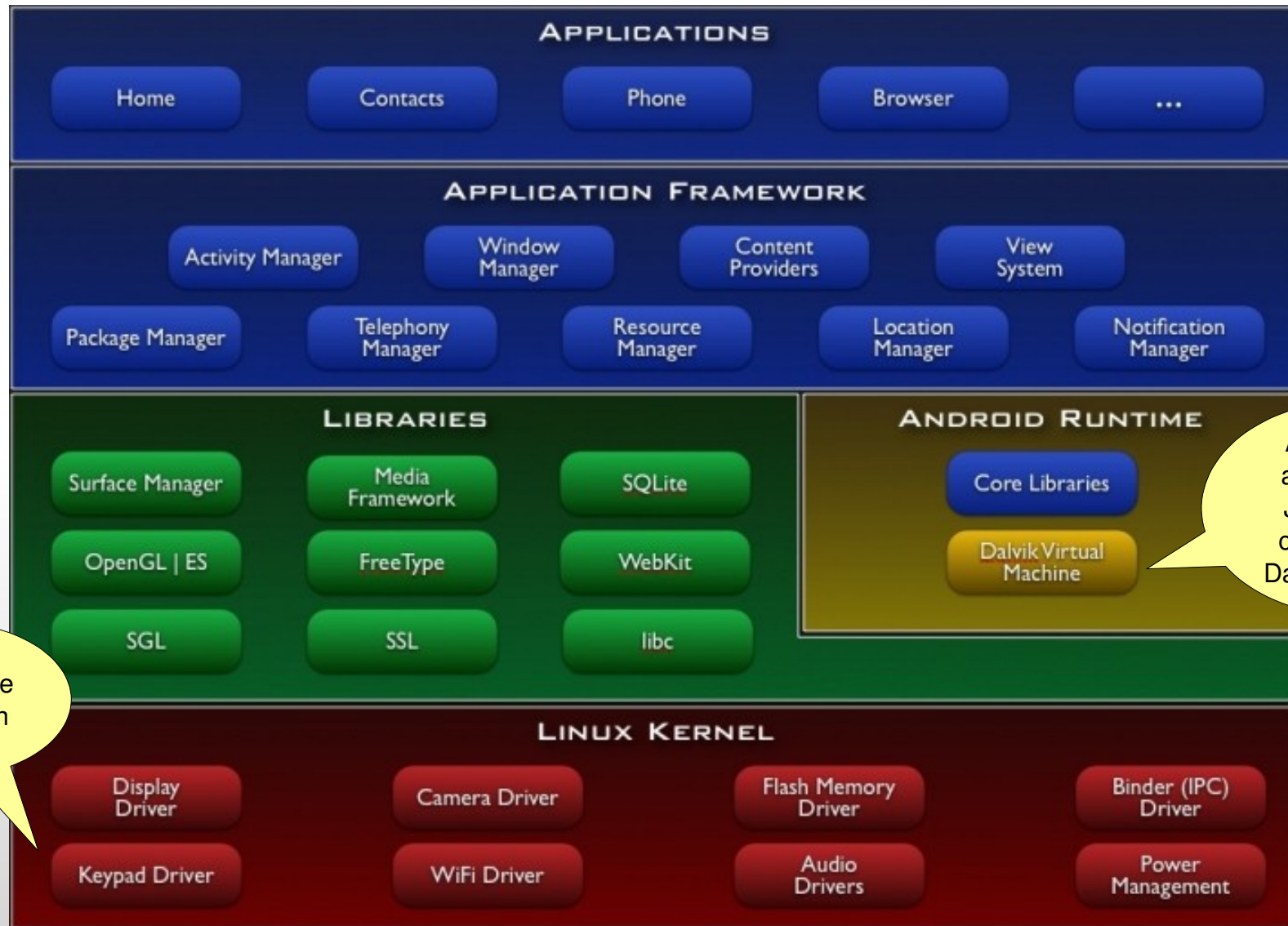
What is Android?

- Google Android is an open source operating system for mobile devices
- Flagship OS for the Open Handset Alliance which has 30 members including:
 - HTC, LG, Samsung, Motorola, DotCoMo, T-Mobile, Sprint, Intel, nVidia, Qualcomm, Texas Instruments

Features of Android

- Application framework enabling reuse and replacement of components
- Dalvik virtual machine optimized for mobile devices
- Integrated browser based on the open source WebKit engine
- Optimized graphics powered by a custom 2D graphics library; 3D graphics based on the OpenGL ES 1.0 specification (hardware acceleration optional)
- SQLite for structured data storage
- Media support for common audio, video, and still image formats (MPEG4, H.264, MP3, AAC, AMR, JPG, PNG, GIF)
- GSM Telephony (hardware dependent)
- Bluetooth, EDGE, 3G, and WiFi (hardware dependent)
- Camera, GPS, compass, and accelerometer (hardware dependent)
- Rich development environment including a device emulator, tools for debugging, memory and performance profiling, and a plugin for the Eclipse IDE

System Architecture



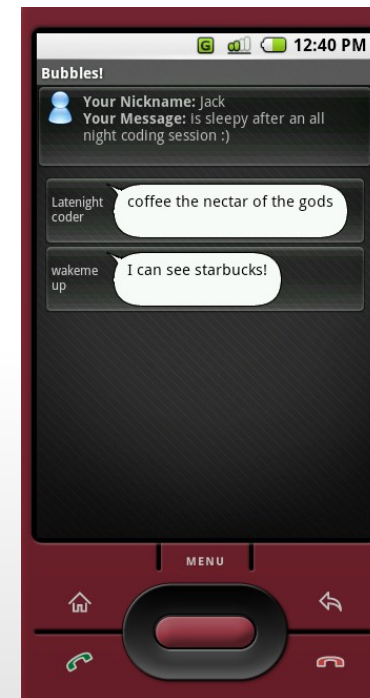
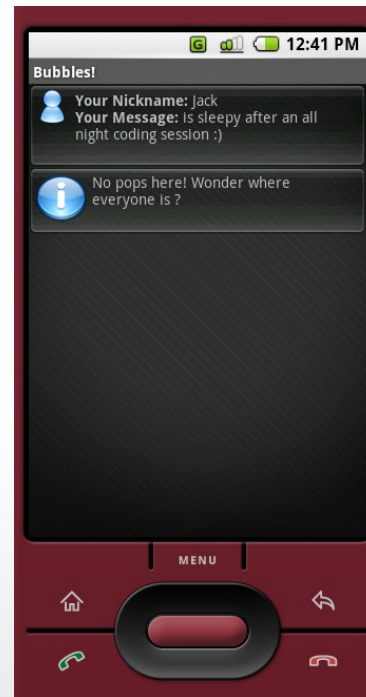
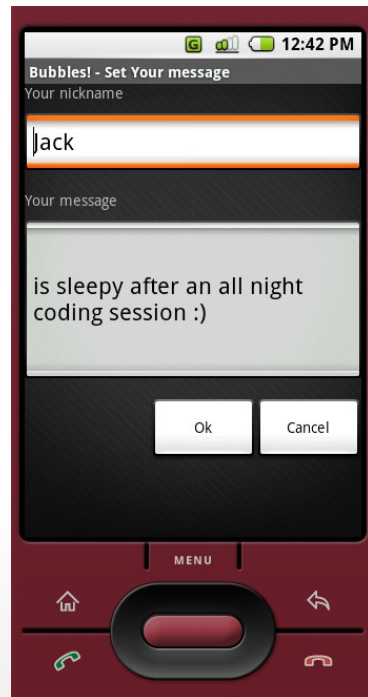
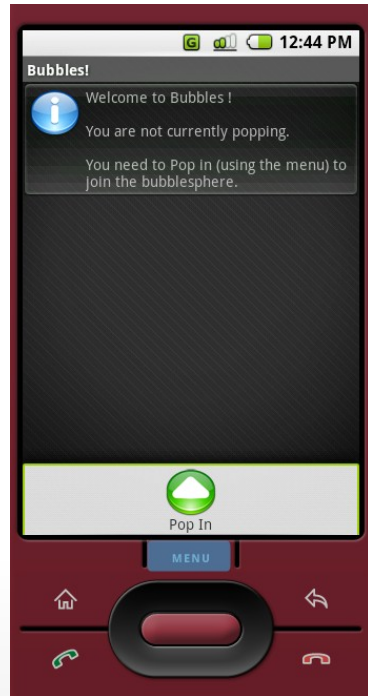
Linux is the foundation

Applications are written in Java but are compiled into Dalvik bytecode

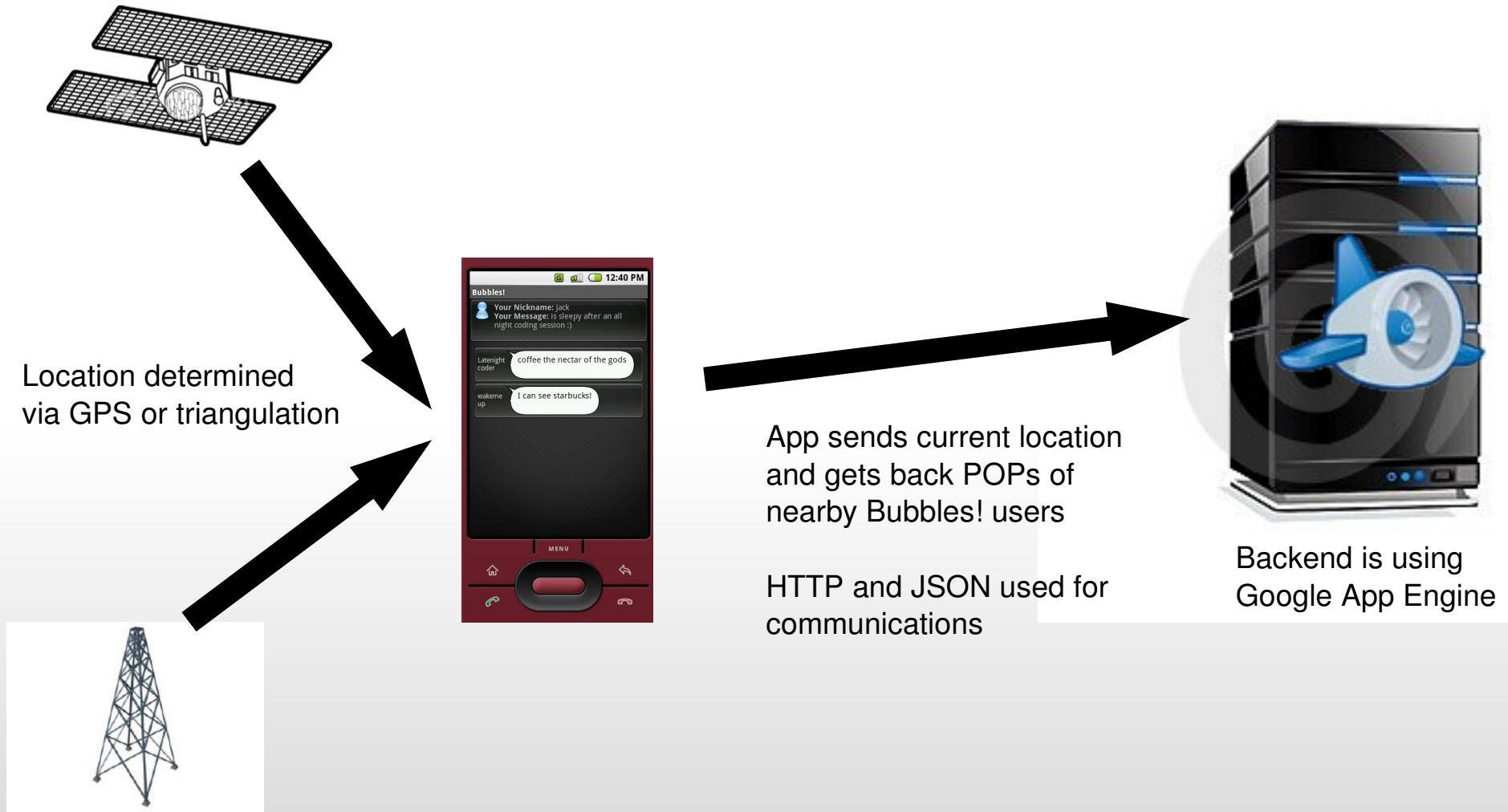
Bubbles!

- Bubbles! was my entry into the Android Developer Challenge
- It scored in the top 25% of 1700 applications but did not make the top 50 :(
- Bubbles! hooks into the location services of Android to provide a location-based Twitter
- It also allows messages to be attached to a physical location (or will soon)

Bubbles! UI



Bubbles! Architecture



Android in the real world

- Currently no actual Android devices
- Rumours are that T-Mobile and HTC will be releasing device in next few months
- LiMO started in 2007 already has 22 handsets
- iPhone 2.0 released
- Buzz has faded to some degree and poor comms from Google
- First beta of SDK just released (18/8/2008)

More info

- <http://code.google.com/android/>
- <http://code.google.com/android/roadmap.html>
- <http://blog.rabidgremlin.com/index.php/tag/bubbles/>
- <http://www.limofoundation.org/>