Understanding Heart and Body Status from a Smartphone

– Introduction to programming on Android–

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Smartphone Sensor Web #2

「**Table of Contents**」

📂. **Class #2**

★. **Installation of the development environment** 🙂

★. **Introduction to Android** 🙂

★. **Consultation and decision of individual objectives (targeted application/demo…)**

What is Google Android?

- A software stack for mobile devices that includes
  - An operating system
  - Middleware
  - Key Applications
- Uses Linux to provide core system services
  - Security
  - Memory management
  - Process management
  - Power management
  - Hardware drivers
- Android Runtime: Dalvik VM
  - Subset of Java developed by Google
  - Optimized for mobile devices (memory & battery management, etc.)
  - Dalvik runs .dex files that are compiled from .class files
  - Introduces some new libraries
  - Does not support some Java Graphic libraries

Android Handsets

HTC G1

Samsung i7500

HTC Hero

Motorola Cliq

Sony X10

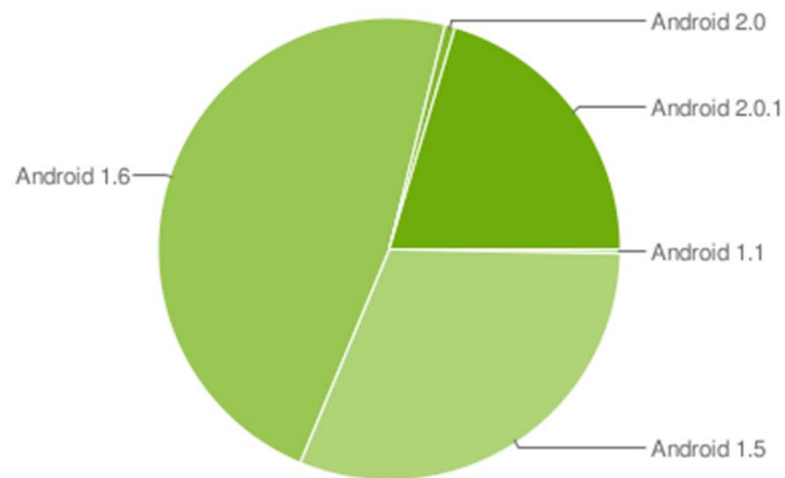HTC Magic

Samsung Moment

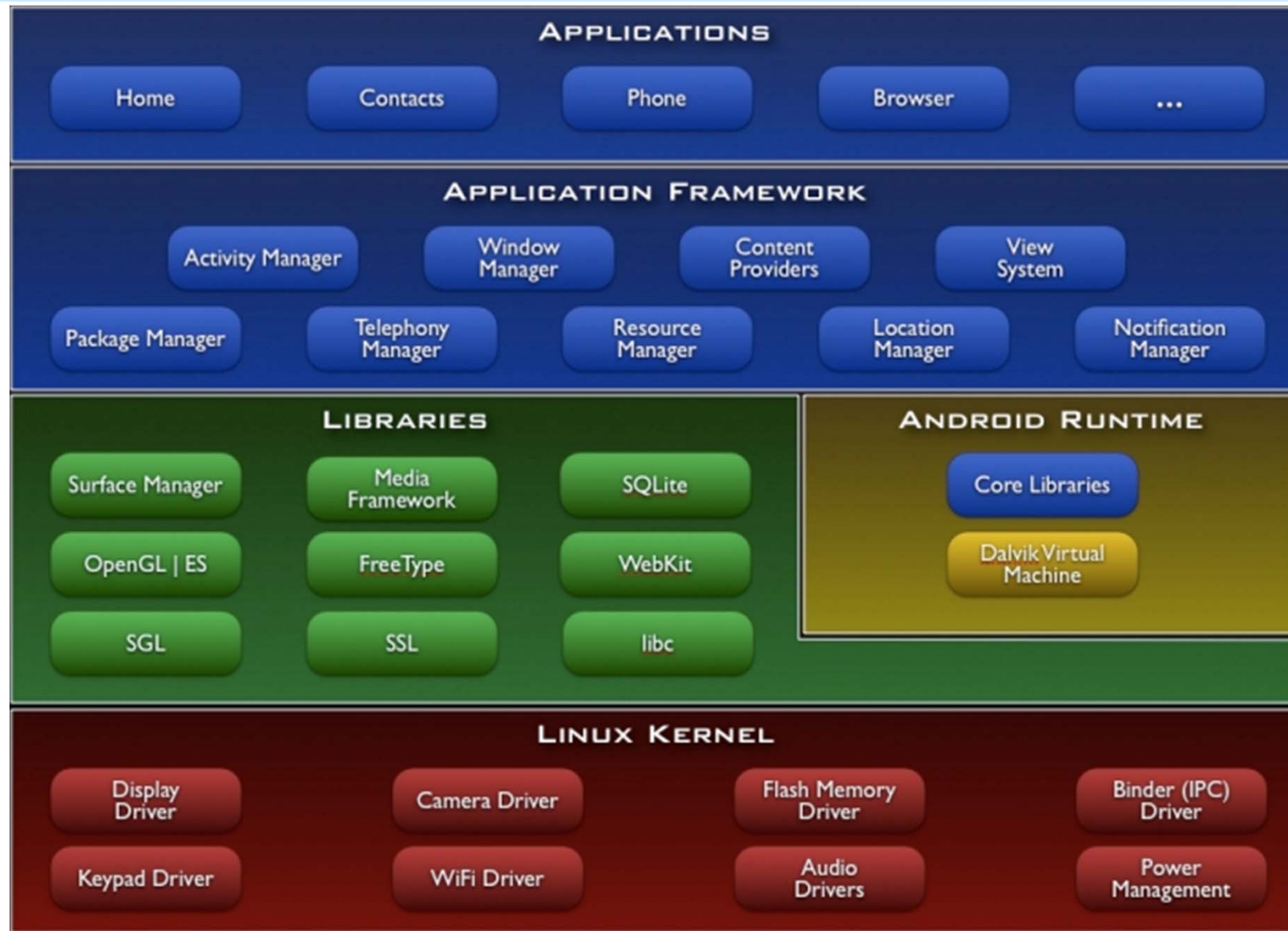Motorola Droid

HTC Tattoo

nexus one

Android Platform

- A software stack for mobile devices that includes
  - An operating system
  - Middleware
  - Key Applications

Android Version	API Level	Release Time
2.1	7	2010.01
2.0.1	6	2009.12
2.0	5	2009.10
1.6	4	2009.09
1.5	3	2009.04
1.1	2	2009.02
1.0	1	2008.09

REF: *Data collected during two weeks ending on 1/4/2010*

Android Platform Architecture