

Mobile Platforms

1 Mobile Platforms

1.1 Market Share

The market share as of July 2008:

- Symbian Ltd
 - Operation System: Symbian OS
 - It is controlled by Nokia.
 - It is open source.
 - Market Share: 65%
 - *[http : //en.wikipedia.org/wiki/Symbian](http://en.wikipedia.org/wiki/Symbian)*
- Microsoft
 - Operating System: Windows Mobile, which was based on Windows NT Kernel
 - Market Share: 12%
 - *[http : //en.wikipedia.org/wiki/Windows_mobile](http://en.wikipedia.org/wiki/Windows_mobile)*
- RIM (Research in Motion)
 - They sell the BlackBerry.
 - Operation System: BlackBerry OS
 - Market Share: 11%
 - *[http : //en.wikipedia.org/wiki/BlackBerry](http://en.wikipedia.org/wiki/BlackBerry)*
- Apple
 - Operating System: iPhone OS and it is based on UNIX BSD
 - Market Share: 7%

– http://en.wikipedia.org/wiki/IPhone_OS

- Palm Computing Inc

– Operating system: Palm OS

– http://en.wikipedia.org/wiki/Palm_OS

- Google

– Operating System: Android and it is based on Linux kernel

– <http://code.google.com/android>

– <http://www.ccs.neu.edu/course/csg250/android.pdf>

1.2 Market Place

- Symbian and Windows created Zune Marketplace.

http://en.wikipedia.org/wiki/Zune_Marketplace#Zune_Marketplace

- Apple has the App Store.

<http://en.wikipedia.org/wiki/Appstore>

1.3 Technology

- Symbian OS

Symbian OS design rules:

– integrity & security of user data

– sustaining high interactivity: reserve the right to kill user applications

– conserving all resources: low power

The type of kernel for Symbian OS is microkernel.

“A microkernel is a minimal computer operating system kernel which, in its purest form, provides no operating-system services at all, only the mechanisms needed to implement such services, such as low-level address space management, thread management, and inter-process communication (IPC). The actual operating-system services are provided by user-mode servers. ” [<http://en.wikipedia.org/wiki/Microkernel>].

Symbian OS has been attacked by several viruses and worms. The most famous worm is Cabir. This worm is spread to other cellphones using wireless Bluetooth signals.

The native language of Symbian OS is C++. Symbian provides both an emulator and a debugger. There exist plugins for Visual Studio and Eclipse.

There exist 3 platforms based on the user interface: UIQ, S60 and MOAP.

Symbian OS is fast and efficient.

- Windows Mobile
The programming language is C# and the developing environment is .NET.
- iPhone SDK
The applications are written in Java. It doesn't run a JVM, nor it supports flash applications.