## A. Piatyha, M. Anastasyev, I. Vanik **Operating system Mac OS**

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When computers were first introduced in the 1940's and 50's, every program written had to provide instructions that told a computer how to use devices such as a printer, how to store information on a disk, as well as how to perform several other tasks not necessarily related to the program. Programmers soon realized it would be smarter to develop one program that could control the computer's hardware, which others programs could have used when they needed it. With that, the first operating system was born.

Today, operating systems control and manage the use of hardware devices such as a printer or mouse. They also provide disk management by letting you store information in files. The operating system also lets you run programs such as the basic word processor. Lastly, the operating system provides several of its own commands that help you to use the computer.

Nowadays there are many operating systems in the world. Talking about the basic systems for personal computers, we usually think about three of them: Mac OS, Windows and Linux Systems.

Mac OS, operating system (OS) developed by the American computer company Apple Inc. The OS was introduced in 1984 to run the company's Macintosh line of personal computers (PCs) [1].

Apple's marketing for the introduction of the Macintosh focused heavily on its operating system's intuitive ease of use. Unlike virtually all other contemporary PCs, the Mac OS was

graphically based. Rather than typing commands and directory paths at text prompts, users moved a mouse pointer to visually navigate the Finder – a series of virtual folders and files, represented by icons. In the 1980s Apple made an agreement allowing Microsoft to use certain aspects of the Mac interface in early versions of Windows. However, except for a brief period in the 1990s, Mac OS has never been licensed for use with computers made by manufacturers other than Apple [1].

Later Mac OS releases introduced features such as Internet file sharing, network browsing, and multiple user accounts. In 2001 the company rolled out Mac OS X, a major redesign based on both the NeXTSTEP system and Apple's most recent OS release. OS X ran on a UNIX kernel (core software code) and offered technical advances such as memory protection and preemptive multitasking, along with a more versatile Finder, an elegant-looking interface called Aqua, and a convenient graphical "dock" bar for launching frequently used applications [1].

The latest Mac OS version is OS X El Capitan (version 10.11). It is the twelfth major release of OS X. OS X El Capitan gives you simpler, smarter ways to do the things you do most with your Mac like working in multiple apps at the same time using Split View, searching for information with an even more helpful Spotlight, keeping your favorite websites handy with Pinned Sites, managing your email with full-screen view and swipe gestures [2].

Let's compare Mac OS with the most popular OS Windows. Mac operating system has traditionally been more stable than Windows. The main reason for this is that Apple used to produce both the hardware (Mac computer) and the software (Mac operating system); they had better control over the integration of the entire system. Now Apple uses in their Macs the same architecture as a PC (a PC generally refers to a computer that runs on the Windows operating system), but is

selective about the components within the system to ensure stability. Since the Windows operating system can run on hundreds of different types of computers, variations in hardware configurations within those computers can cause stability problems.

The most noticeable difference between Mac OS and Windows is in the user interfaces. While many computer users will proclaim one or the other "superior" or "best", this is ultimately a matter of personal preference. Highlights of the UI in Mac OS X include Launchpad (a screen full of app icons for easily launching your favorite apps), hot corners that can be customized for various types of views, a "dock" that has icons for your favorite apps, full screen mode for apps, and "spaces" that create as many desktops as you like so you can minimize clutter. With Windows 8 UI highlights include a touch-friendly "metro" interface that contains "live tiles", rectangular boxes of varying sizes on the screen that represent an app and get refreshed with the latest content from the app. Several apps utilizing the "metro" interface are full screen apps like in tablet computers [2, 3].

Mac computers are most widely used in the creative professional market, including in journalism and desktop publishing, video editing and audio editing, but have also made inroads into the educative and scientific research sectors. PCs are also used with some of the video and audio editing and research purposes but are found largely as the Home or Office Computer. PCs are also widely used in gaming due to a wider variety of games available for the Windows platform [2, 3].

The percentage of the market held by either OS is unclear. According to one source, Windows has a market share of 91.8% compared to OS X with 7.3%. Also, sales numbers do not necessarily reflect actual usage levels of various operating systems. Most new PCs are purchased with Windows installed, but users may change or upgrade to a different OS.

Additionally, some argue that Apple computers have a longer lifespan, which could mean that sales of Apple computers do not accurately reflect their current usage levels compared to Windows computers [4].

Traditionally PCs have had the upper hand when it comes to gaming because more publishers developed games for the PC platform. PCs have also provided more powerful processors and speed is an important criterion when it comes to gaming.

PCs and Macs can usually share peripherals if they connect via USB or Bluetooth, three industry standards available on every Mac. Most popular applications for Mac and PC use the same file formats, making it simple to exchange documents with friends and coworkers or move existing files from a PC to a Mac.

Both Macs and Windows have patches or updates provided online by Apple and Microsoft, respectively. Since Apple Macs now run on Intel processors, they can run Windows. At the same time, PCs have no opportunity to run Mac OS.

## References:

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