# A History of Apple's Operating Systems

© Aviiz Sivgv. All Rigvas Reserve

## Introduction

Mac OS X is a unique operating system in that it represents a rather successful coming together of paradigms, ideologies, and technologies that have usually resisted each other in the past. It is a result of the trials and tribulations of Apple and NeXT, as well as their user and developer communities. Mac OS X is perhaps one of the best examples of how a capable system can result through the direct or indirect efforts of corporations, academic and research communities, the Open Source and Free Software movements, and even individuals.

Apple has been around since 1976, and many accounts of its history have been told. If the story of Apple as a company is fascinating, so is the "technical" story of Apple's operating systems.

This document discusses operating systems that Apple has created in the past, and many that it tried to create. Through this discussion, we will come across several technologies the confluence of which eventually led to Mac OS X. An important goal of the discussion is to better understand the reasons, and if possible, the rationale behind Mac OS X and its important components. This, in turn, will be helpful in understanding and appreciating the system as it is today.

My approach in this discussion is to have somewhat high magnitudes of the depth and breadth of historical coverage, as long as I believe the discussion is interesting and relevant from a system design perspective, with reason. For example, while I will briefly describe "the influence of Xerox PARC" and the background of Mach, I will not go to farcical limits and talk about the invention of the transistor, or the discovery of Silicon.

#### **Feedback**

I will welcome, and do request constructive feedback. I will highly appreciate if any errors, omissions, or misrepresentations are pointed out to me.

I thank all those who have taken time to send me feedback in the past, and apologize to those whom I did not, rather could not, reply to individually.

#### **Contents**

#### First Bytes into an Apple

- Early Apple Systems
- Apple DOS

- o Apple Pascal
- o Apple CP/M
- o Apple SOS
- Apple ProDOS

#### • <u>Inspirations</u>

- The oNLine System
- Smalltalk
- Xerox Alto
- Xerox STAR System

## • The Graphical Age at Apple

- o Lisa OS
- Macintosh

### • Many Systems for Many Apples

- System Software Releases 2 6
- Blue, Pink, and Red
- o GS/OS
- o A/UX

#### Seeking Power

- o System 7
- o AIM for POWER
- Mac OS for PowerPC
- NetWare for PowerPC
- AIX for PowerPC

# • Quest for the Operating System

- Star Trek
- o Raptor
- NuKernel
- Taligent and TalOS
- Copland
- Gershwin
- BeOS
- o Plan A

#### • The NeXT Chapter

- NEXTSTEP
- o OPENSTEP

### • What NeXT? The Mach Factor

- o Rochester's Intelligent Gateway
- Accent
- o Mach
- MkLinux

Musical Names

# • Strategies

- o Mac OS 8
- o Mac OS 9
- Rhapsody
- o Blue Box
- Yellow Box

## • Towards Mac OS X

- Mac OS X Server
- o Darwin
- o Mac OS X Developer Previews
- o Mac OS X Public Beta
- o Mac OS X 10.x

#### Others

- o Mac OS on Pippin
- Newton OS
- o iPod's OS