

MazOS – Value Proposition

This document highlights why this project was created and what value it brings.

Why?

In the current technological landscape, there is a new abstraction and framework emerging almost daily. In the race to stay on top of this ever-moving field I found myself overlooking the basics and foundational principles of computing. This project was an opportunity for me to take a step back and fully engage with and understand the technology that ultimately sits at the base of all these new frameworks – Operating Systems.

Unique Selling Point

It is true, there are other hobbyist operating systems out there. MazOS allows for multiple processes and wide range of file operations supported by the FAT32 filesystem. However, where MazOS differentiates from the others, is through its wide range of drivers ranging from keyboard, mouse, display to audio and disk drivers. Additionally, support for opening and viewing .png images offers an additional feature that is often overlooked. Furthermore, support for a range of POSIX system calls offers a familiar interface for other POSIX-compliant software.

Relevancy

Every application we use daily, relies on an OS to manage hardware, memory, processes and security. OSes abstract the complexity associated with the lower levels and allows developers to build software without having to worry about CPU registers, memory addressing or peripheral communication. Hence, it is important to understand the fundamentals in order to be able to build more complex software that is intended to reach users

Future Roadmap

Next leap for MazOS would be to include support for web applications. However, that is quite of an ambitious goal (for now). Therefore, I propose that a realistic goal would be to implement a basic TCP/IP stack and include support for ping and traceroute like tools.