## **Problem Statement**

On August 25, 1991 a man named Linus Torvalds posted a message announcing his new creation. It was a free kernal that was developed to mimic the behavior of the very popular UNIX terminal. Since he released the source code for others to use, they were able to help build features into this new creation(Hayward 2012, p.1). In only a few years different branches of development centered around this kernal started to sprout up, and iterations continue to be developed to this day, the most famous being the Android platform which runs 38% of computers in the world(Operating System Market 2017).

Due to the open nature of development this operating system is easy for knowlagable people to take apart and rebuild to better fit the needs of a user. This flexability, efficiency, and lack of licensing fees has caused rapid adoption among companies, and developers. Servers that run linux are on the rise at the expense of UNIX, Windows, and mainframe technologies, and companies have an increasing need for developers train the using Linux (Vaughan-Nichols 2015). Aside from being a marketable skill the Linux environment has many tools made for free by developers for developers that increase productivity, and reduce frustration. This would explain why Linux is the second most used platform and the most loved platform among professional developers(Stack Overflow Developer Survey 2017).

Despite all these reasons to incentivise students to learn linux there are still very few times linux is even mentioned to Software Engineering students at Iowa State.

## References

Vaughan-Nichols, Steven J. Linux Foundation Finds Enterprise Linux Growing at Windows' Expense. ZDNet, ZDNet, 4 Dec. 2015,

www.zdnet.com/article/linux-foundation-finds-enterprise-linux-growing-at-windows-expense/.

Stack Overflow Developer Survey 2017. Stack Overflow, insights.stackoverflow.com/survey/2017#most-popular-technologies.

The Complete Beginner's Guide to Linux. Linux.com — The Source for Linux Information, 13 Aug. 2014, www.linux.com/learn/complete-beginners-guide-linux%20.

Hayward, David. The History of Linux: How Time Has Shaped the Penguin.TechRadar, TechRadar pro IT Insights for Business, 22 Nov. 2012, www.techradar.com/news/software/operating-systems/the-history-of-linux-how-time-has-shaped-the-penguin-1113914.

Operating System Market Share Worldwide. StatCounter Global Stats, gs.statcounter.com/os-market-share#monthly-201704-201704-bar.