Michael Seeley (altoids3@mail.com)
Zach Taylor (zbryantaylor@gmail.com)
Ben Bushnell (benjaminpaulb@gmail.com)

Description

For our project, we are choosing to write a very small and stripped down second-stage bootloader and kernel. For the bootloader, we will write a simple boot sector which is about 500 bytes of assembly code. The boot sector will then link to a 32-bit second stage, which will load a mini-kernel using mostly C code. We are also hoping to write an incredibly stripped down and simple kernel (called Popcorn), that executes some sort of fun, but ultimately meaningless execution of code as a proof of concept (ASCII art, print statements, etc.).

Deliverables

- Each get emulator set up for consistent development environments
- Boot sector .ASM and its assembled .BIN
- Second-stage bootloader setup assembly code
- Second-stage bootloader C code and the bootloader's assembled .BIN
- Linked .BIN files to load a mini-kernel
- Minimal kernel that we use to test bootloader
- Brief technical report on methods and interesting findings

Division of Labor

- One of us three will take care of the assembly code and linking.
- Another one of us will take care of the C code of the second-stage bootloader.
- The last one of us will take care of the mini-kernel.
- Each of us will obviously help the others when able, especially if one of our parts takes less time than estimated.

Timeline

- ➔ **11/4** - Get emulators working and boot sector assembled into .BIN.
- ➔ **11/10** - Link the boot sector to the second-stage bootloader with assembly written.
- ➔ **11/15** - Have mini-kernel either written or found by now. Also finish writing C for second-stage boot loader.
- ➔ **11/20** - Test everything together and wrap up development