Final Project Report – Basic bootloader

This project is built with x86 Assembly language, serving a basic bootloader with basic file management functionality, in order to demonstrate the ability and knowledge we got from this course.

This basic bootloader has 4 functions require user’s interactions, including:

1. get\_input:

Reads a single keypress from the user.

Used to select menu options.

1. get\_input\_string

Reads a string input (up to 10 characters) from the user.

Used for entering file names during rename and delete operations.

1. rename\_file

Prompts the user to enter a new file name.

Uses get\_input\_string to read the new name.

1. delete\_file

Prompts the user to enter the name of the file to delete.

Uses get\_input\_string to read the file name to delete.

This bootloader is a simple example of low-level system programming using x86 assembly language. It provides a basic menu-driven interface and simulates file management operations such as displaying, renaming, and deleting files. The code provides an example for learning how a computer starts up and how to interact directly with hardware at the lowest level.