

**SOFT3122: System Programing**

**Term Project**

**Simgenaz Yalçinkaya – 216CS2028**

## 1) Introduction

In this project I designed and implement a file manager application, isik\_filemanager in the C programming language. In this program you can do these functionalities create new file, delete an existing file, rename an existing file, copy a file, move a file from one folder to another. For the text files you can append text to the end of a file, insert text in a specific position within the file, remove all text present in a file, show the content of a text data store, with the ability to pause per page and the number of lines per page could be specified by the user. The program support all commands.

## 2)Goals

The project contains the following methods:

**Create a new file:** Users can create a new file with their selected name.

**Delete an existing file:** Users can delete an existing file.

**Rename an existing file:** Users can rename an existing file.

**Copy a file:** Users can copy a file.

**Move a file:** Users can move a file from one location to another with selecting the source and destination.

**Append text to a file:** Users can add a text to an exist file. In the application they can insert text.

**Remove all text from a file:** Users can remove all texts from an exist file selecting the file name.

**Show file content:** Users can see the content of file. The application shows the content of file.

## 3)Implementiton

In this file manager application I used library functions for example `fopen()`, `fclose()`, `fseek()`, `fwrite()`, `fread()`, `rename()` and `remove()`. I used some file opening modes there are `w`, `r`, `a`, `r+`. These are file opening modes or Access modes specify the allowed operations on the file to be opened. They are passed as an argument to the `fopen()` function.

Firstly 'w' this one open for reading in text mode. If the file exists, its contents are overwritten. If the file doesnt exist, a new file is created. If unable to open the file it returns NULL. Secondly, 'r' this one searches file. If the file is opened successfully `fopen()` loads it into memory and set sup a pointer that points to the FIRST char in it. If the file cannot be opened

fopen() returns NULL. Thirdly, 'a' this one searches file. If the file is opened successfully fopen() loads it into memory and sets up a pointer that points to the LAST char in it. If the file doesn't exist, a new file is created. If it is unable to open the file, it returns NULL. Finally, 'r+' this one searches file. It is opened successfully fopen() loads it into memory and set up a pointer that points to the FIRST char in it. If unable to open the file it returns NULL.

In the application users first see a command line when they write a '/help' they can see all the list of commands. You can write a command that you want to make something to file.

Overall, the isik\_filemanager project opens the file, reads the file, creates a new file, deletes file, rename file and more. You can see in the code text all commands.

#### **4)Final**

In the program when you run it firstly there is 'Enter a command ( or type'/help' for a list of commands): ' says then you can see the all command and you can enter the command for your needs. After you write '/help' ;

- **/create <filename>**
- **/delete <filename>**
- **/rename <old\_filename> <new\_filename>**
- **/copy <source\_filename> <destination\_filename>**
- **/move <source\_filename> <destination\_folder>**
- **/append <filename> <text\_to\_append>**
- **/insert <filename> <text\_to\_insert>**
- **/remove <filename>**
- **/show <filename> <lines\_per\_page>**

There is a sample example when you run it:





