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File Management System

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Stream - CSE, Year - 2022-2023

Introduction:

The file management system is completely made by using C programming language and this Management system include the actions like create a file, writing in a file , read a file , appending in a file , deleting a file from the folder etc. Users can choose the particular option by giving some input in this Command Line Interface. This file management system is capable for opening any type of files.

Functions:

Some basic functions are used to do this complete file management system. Total 6 individual functions are created like: createfile() , writefile() , readfile() , appendfile() , deletefile() etc.

createfile():

fopen ("file_name","mode") this will create the file.

writefile():

fopen ("file_name","w") this will open the file in writing mode. If we want to remove all the previous data stored in the file and rewrite it or if we want to write a content in a file for the first time then this function will be used.

fscanf() this function is used to take user input of the content of the file and then stored it inside the file.

readfile():

fopen("file_name","r") this will open the file in read only mode i.e. we cannot able to write anything in the file in this mode. There are many way outs for reading the content of the file like *fgetc()* , *fgets()* , *fread()* etc.

fgets() this function is used here for reading the content of the file , which helps one to read the file as a string and by using *printf()* function we can also see the content of file.

appendfile():

fopen("file_name","a") this will open the file in append mode i.e. we can able to write in the file without erasing the previous data. If we open the target file in this mode the new content is appended at the end of the previous data.

Here also the *fscanf()* function is used for writing the new content.

deletefile():

remove("file_name") this will delete a file from the directory or folder and moved it to the recycle bin.

This all above the functions created and used for this file management system.

main():

here by a simple integer input users can choose the option for doing their desired work. And then the work is performed and the program will run infinite times until the exit option is not chosen. Here we use some basic functions loops etc.

while(iteration) is used for running the program for infinite times.

switch(variable_name) and *case(value)* is used for executing the work chosen by the user.

break is used for break the loop.

return is used for completing the function and terminate it.

Source Code:

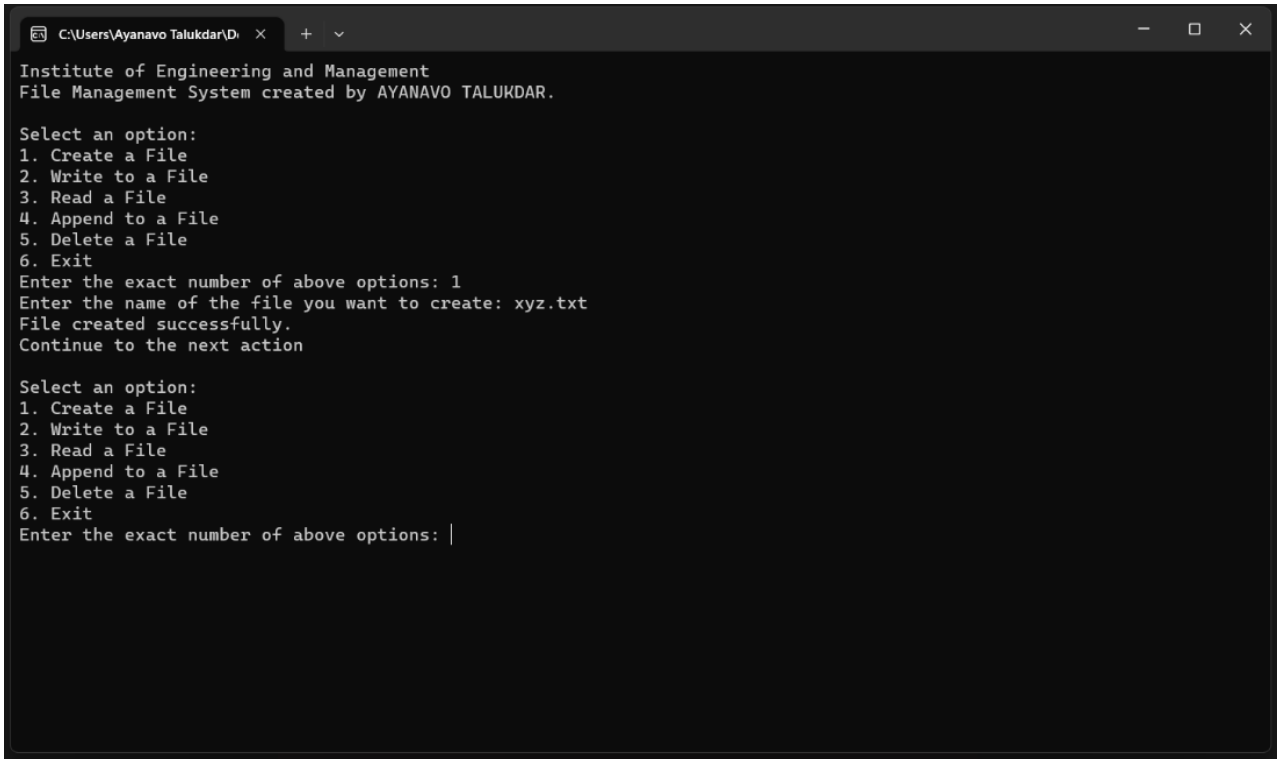
```
#include<stdio.h>
#include <stdlib.h>


//creation of file...
void createFile() {
FILE *file;
char file_Name[100];
printf("Enter the name of the file you want to create: ");
scanf("%s",&file_Name);
file = fopen(file_Name, "w");
if (file == NULL) {
printf("Error creating file.\n");
return;
}
printf("File created successfully.\n");
fclose(file);
printf("Continue to the next action\n");
}

//writing in a file...
void writeFile() {
FILE *file;
char writefileName[100];
char content[1000];
printf("Enter the name of the file you want to write: ");
```

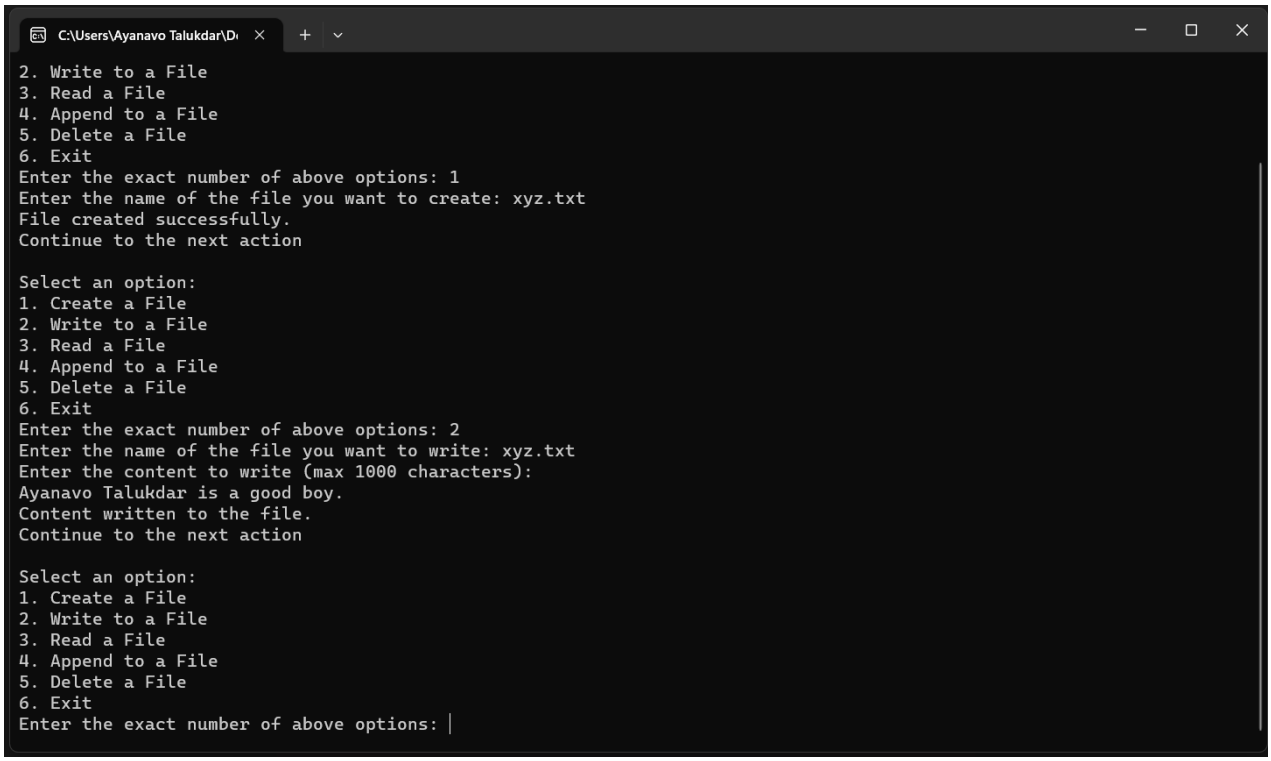
```
scanf("%s", &writefileName);
file = fopen(writefileName, "w");
if (file == NULL) {
printf("Error opening file.\n");
return;
}
printf("Enter the content to write (max 1000 characters):\n");
scanf(" %[^\n]", &content);
fprintf(file, "%s\n", content);
printf("Content written to the file.\n");
fclose(file);
printf("Continue to the next action\n");
}

//reading in a file...
void readFile() {
FILE *file;
char fileName[100];
char content[1000];
printf("Enter the name of the file you want to read: ");
scanf("%s",&fileName);
file = fopen(fileName, "r");
if (file == NULL) {
printf("Error opening file.\n");
return;
}
printf("File content:\n");
while (fgets(content, sizeof(content), file) != NULL) {
printf("%s", content);
}
fclose(file);
printf("Continue to the next action\n");
}

//appending in a file...
void appendFile() {
FILE *file;
char writefileName[100];
char content[1000];
printf("Enter the name of the file you want to write: ");
scanf("%s", &writefileName);
file = fopen(writefileName, "a");
if (file == NULL) {
printf("Error opening file.\n");
return;
}
printf("Enter the content to write (max 1000 characters):\n");
scanf(" %[^\n]", &content);
```

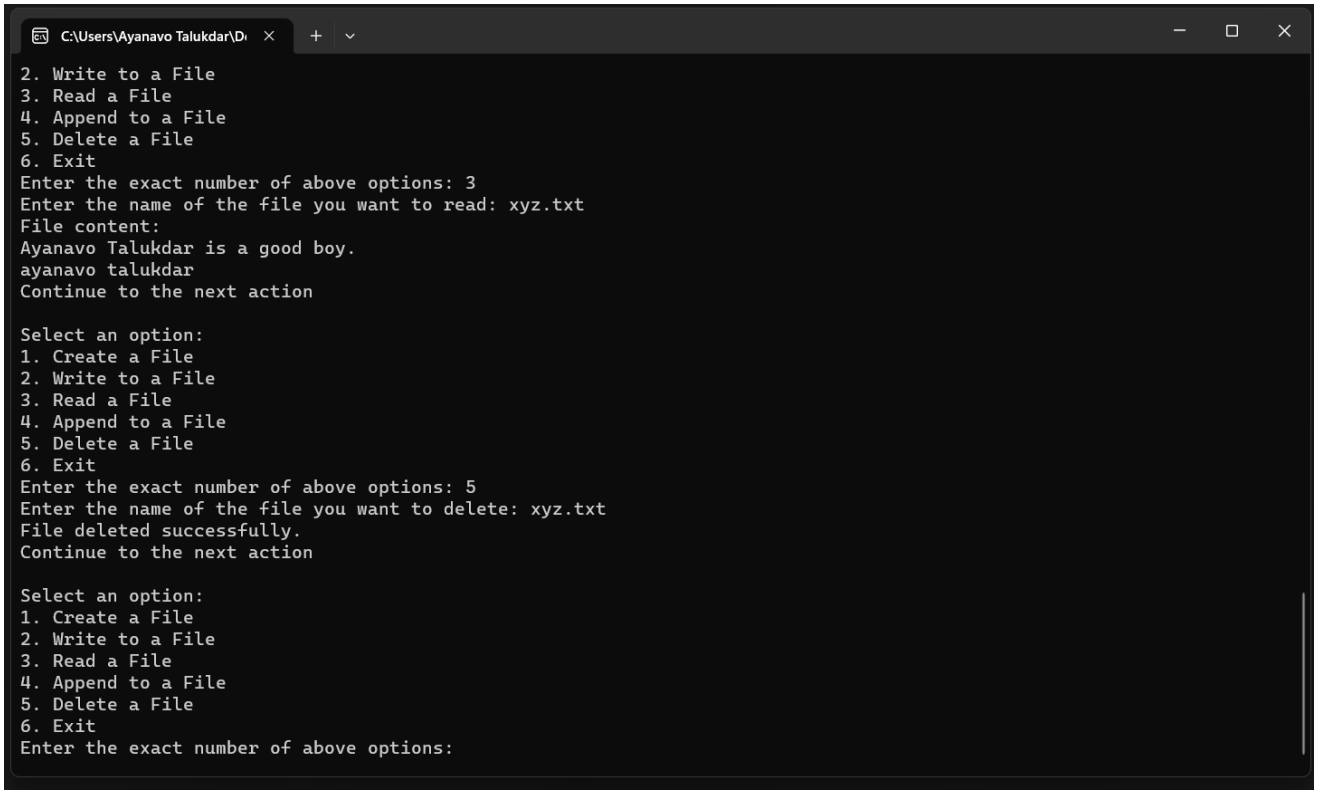
```
fprintf(file, "%s\n", content);
printf("Content written to the file.\n");
fclose(file);
printf("Continue to the next action\n");
}

//deleting a file...
void deleteFile() {
char fileName[100];
printf("Enter the name of the file you want to delete: ");
scanf("%s",&fileName);
if (remove(fileName) == 0) {
printf("File deleted successfully.\n");
} else {
printf("Error deleting file.\n");
}
printf("Continue to the next action\n");
}

//main code
int main() {
int n;
printf("\nInstitute of Engineering and Management\n");
printf("File Management System created by AYANAVO TALUKDAR.\n");
while (1) {
printf("\nSelect an option:\n");
printf("1. Create a File\n");
printf("2. Write to a File\n");
printf("3. Read a File\n");
printf("4. Append to a File\n");
printf("5. Delete a File\n");
printf("6. Exit\n");
printf("Enter the exact number of above options: ");
scanf("%d", &n);
switch (n) {
case 1:
   createFile();
   break;
case 2:
   writeFile();
   break;
case 3:
   readFile();
   break;
case 4:
   appendFile();
   break;
case 5:
```

```
    deleteFile();
    break;
case 6:
    printf("Thank you for using our file management system portal!!!\n");
    return 0;
default:
    printf("Give a proper option number.");
    break;
}
}
return 0;
}
```

Screenshots:




C:\Users\Ayanavo Talukdar\D
2. Write to a File
3. Read a File
4. Append to a File
5. Delete a File
6. Exit
Enter the exact number of above options: 1
Enter the name of the file you want to create: xyz.txt
File created successfully.
Continue to the next action
Select an option:
1. Create a File
2. Write to a File
3. Read a File
4. Append to a File
5. Delete a File
6. Exit
Enter the exact number of above options: 2
Enter the name of the file you want to write: xyz.txt
Enter the content to write (max 1000 characters):
Ayanavo Talukdar is a good boy.
Content written to the file.
Continue to the next action
Select an option:
1. Create a File
2. Write to a File
3. Read a File
4. Append to a File
5. Delete a File
6. Exit
Enter the exact number of above options:


C:\Users\Ayanavo Talukdar\D
2. Write to a File
3. Read a File
4. Append to a File
5. Delete a File
6. Exit
Enter the exact number of above options: 3
Enter the name of the file you want to read: xyz.txt
File content:
Ayanavo Talukdar is a good boy.
ayanavo talukdar
Continue to the next action
Select an option:
1. Create a File
2. Write to a File
3. Read a File
4. Append to a File
5. Delete a File
6. Exit
Enter the exact number of above options: 5
Enter the name of the file you want to delete: xyz.txt
File deleted successfully.
Continue to the next action
Select an option:
1. Create a File
2. Write to a File
3. Read a File
4. Append to a File
5. Delete a File
6. Exit
Enter the exact number of above options: