DEPARTMENT OF BASIC SCIENCE AND HUMANITIES
INSTITUTE OF ENGINEERING AND MANAGEMENT, KOLKATA

"FILE MANAGEMENT SYSTEM"

Submitted by:-

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Stream: Computer Science Engineering(AIML)
Subject: Programming for Problem Solving
Subject Code: ESC-103 (Pr)

Under the supervision of:**Prof.**
Swarnendu Ghosh

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(PROJECT REPORT SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE SECOND SEMESTER)

CERTIFICATE OF RECOMMENDATION

We hereby recommend that the project prepared under our supervision by **Soumyo Mallick**, entitled **"File Management System"** be accepted in fulfillment of the requirements for the degree of fulfillment of the second semester.

Head of the Department	Project Supervisor
IEM, Kolkata	Basic Science and Humanities

1. Introduction:

This project is assigned to me for developing a File Management System with the help of basic C programming language.

The primary goal of the task is to create a file control device where we need to position up simple files and contents of the various files and thereby with the help of c programming, we have to create a portal (.Txt document) for adding new files, searching documents, deleting documents, editing them and in the end seeing all of the files at a look.

2. Variable Description:

The different variables used in this project are listed under:-

1. int- To store integer datatypes.
2. char- To store character datatypes.
3. Array- To store the files altogether

3. Function Description:

The different functions (structures) used in this project are listed under:-

1. File - For storing the required file details *vis. Contents of the file*

4. Programs:

File Management System.c

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

struct file {
    char name[50];
```

```
    int size;
};

void addFile(struct file *files, int *count) {
    printf("Enter file name: ");
    scanf("%s", files[*count].name);
    printf("Enter file size (in KB): ");
    scanf("%d", &files[*count].size);
    (*count)++;
    printf("File added successfully!\n");
}

void modifyFile(struct file *files, int count) {
    if (count == 0) {
        printf("No files found!\n");
        return;
    }

    char filename[50];
    printf("Enter the name of the file to modify: ");
    scanf("%s", filename);

    for (int i = 0; i < count; i++) {
        if (strcmp(files[i].name, filename) == 0) {
            printf("Enter new file size (in KB): ");
            scanf("%d", &files[i].size);
            printf("File modified successfully!\n");
            return;
        }
    }

    printf("File not found!\n");
}

void deleteFile(struct file *files, int *count) {
    if (*count == 0) {
        printf("No files found!\n");
        return;
    }

    char filename[50];
```

```
    printf("Enter the name of the file to delete: ");
    scanf("%s", filename);

    for (int i = 0; i < *count; i++) {
        if (strcmp(files[i].name, filename) == 0) {
            for (int j = i; j < (*count) - 1; j++) {
                strcpy(files[j].name, files[j + 1].name);
                files[j].size = files[j + 1].size;
            }
            (*count)--;
            printf("File deleted successfully!\n");
            return;
        }
    }

    printf("File not found!\n");
}

void displayFiles(struct file *files, int count) {
    if (count == 0) {
        printf("No files found!\n");
    } else {
        printf("File List:\n");
        printf("-----------------------------------------------
-----\n");
        printf("Name\t\tSize (KB)\n");
        printf("-----------------------------------------------
-----\n");
        for (int i = 0; i < count; i++) {
            printf("%s\t\t%d\n", files[i].name, files[i].size);
        }
        printf("-----------------------------------------------
-----\n");
    }
}

int main() {
    struct file files[100];
    int count = 0;
    int choice;

    while (1) {
```

```
            printf("\nFile Management System\n");
            printf("1. Add File\n");
            printf("2. Modify File\n");
            printf("3. Delete File\n");
            printf("4. Display Files\n");
            printf("5. Exit\n");
            printf("Enter your choice: ");
            scanf("%d", &choice);

            switch (choice) {
                case 1:
                    addFile(files, &count);
                    break;
                case 2:
                    modifyFile(files, count);
                    break;
                case 3:
                    deleteFile(files, &count);
                    break;
                case 4:
                    displayFiles(files, count);
                    break;
                case 5:
                    printf("Exiting File Management System.\n");
                    exit(0);
                default:
                    printf("Invalid choice! Please try again.\n");
            }
        }

        return 0;
    }
```

5. Outputs:

Sample outputs (screenshots) to demonstrate the functionalities in programs are listed below.

1. Adding a file…

```
File Management System
1. Add File
2. Modify File
3. Delete File
4. Display Files
5. Exit
Enter your choice: 1
Enter file name: Test
Enter file size (in KB): 200
File added successfully!
```

2. Modify The file

```
File Management System
1. Add File
2. Modify File
3. Delete File
4. Display Files
5. Exit
Enter your choice: 2
Enter the name of the file to modify: Thumb
Enter new file size (in KB): 500
File modified successfully!
```

3. Delete the File

```
File Management System
1. Add File
2. Modify File
3. Delete File
4. Display Files
5. Exit
Enter your choice: 3
Enter the name of the file to delete: Thumb
File deleted successfully!
```

4. Display The File

```
File Management System
1. Add File
2. Modify File
3. Delete File
4. Display Files
5. Exit
Enter your choice: 4
No files found!
```

THANK YOU!!