

S.No: 1	Exp. Name: <i>Project Module</i>	Date: 2024-06-13
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Aim:

Project Module

Source Code:

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hello.c
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#include <stdio.h>
#include <stdbool.h>
#include <string.h>

#define MAX_APPOINTMENTS 100
#define MAX_NAME_LENGTH 50
#define MAX_DESCRIPTION_LENGTH 100
#define MAX_DATE_LENGTH 20
#define MAX_DAY_LENGTH 20

typedef struct {
    char name[MAX_NAME_LENGTH];
    char day[MAX_DAY_LENGTH];
    char date[MAX_DATE_LENGTH];
    int hour;
    int minute;
    char description[MAX_DESCRIPTION_LENGTH];
} Appointment;

Appointment appointments[MAX_APPOINTMENTS];
int numAppointments = 0;

void addAppointment() {
    if (numAppointments < MAX_APPOINTMENTS) {
        printf("Enter day of the week: ");
        scanf("%s", appointments[numAppointments].day);
        printf("Enter date (DD/MM/YYYY): ");
        scanf("%s", appointments[numAppointments].date);
        printf("Enter name of appointment: ");
        scanf("%s", appointments[numAppointments].name);
        printf("Enter hour (0-23): ");
        scanf("%d", &appointments[numAppointments].hour);
        printf("Enter minute (0-59): ");
        scanf("%d", &appointments[numAppointments].minute);
        printf("Enter description: ");
        scanf("%s", appointments[numAppointments].description);
        numAppointments++;
        printf("Appointment added successfully.\n");
    } else {
        printf("Appointment schedule is full.\n");
    }
}

void displayAppointments() {
    if (numAppointments == 0) {
        printf("No appointments scheduled.\n");
    } else {
        printf("Scheduled appointments:\n");
        for (int i = 0; i < numAppointments; i++) {
            printf("%d: %s - %s, %s at %02d:%02d - %s\n", i+1, appointments[i].name,
appointments[i].day, appointments[i].date, appointments[i].hour,
appointments[i].minute, appointments[i].description);
        }
    }
}

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        if (index >= 0 && index < numAppointments) {
            for (int i = index; i < numAppointments - 1; i++) {
                appointments[i] = appointments[i + 1];
            }
            numAppointments--;
            printf("Appointment deleted successfully.\n");
        } else {
            printf("Invalid appointment index.\n");
        }
    }

int searchAppointment(const char name[]) {
    for (int i = 0; i < numAppointments; i++) {
        if (strcmp(appointments[i].name, name) == 0) {
            return i;
        }
    }
    return -1; // Appointment not found
}

void updateAppointment(int index) {
    if (index >= 0 && index < numAppointments) {
        printf("Enter new day of the week: ");
        scanf("%s", appointments[index].day);
        printf("Enter new date (DD/MM/YYYY): ");
        scanf("%s", appointments[index].date);
        printf("Enter new hour (0-23): ");
        scanf("%d", &appointments[index].hour);
        printf("Enter new minute (0-59): ");
        scanf("%d", &appointments[index].minute);
        printf("Enter new description: ");
        scanf("%s", appointments[index].description);
        printf("Appointment updated successfully.\n");
    } else {
        printf("Invalid appointment index.\n");
    }
}

int main() {
    char choice;
    do {
        printf("\n1. Add Appointment\n2. Display Appointments\n3. Delete
Appointment\n4. Search Appointment\n5. Update Appointment\n6. Exit\n");
        printf("Enter your choice: ");
        scanf(" %c", &choice);
        switch (choice) {
            case '1':
                addAppointment();
                break;
            case '2':
                displayAppointments();
                break;
            case '3':
                if (numAppointments == 0) {
                    printf("No appointments to delete.\n");
                }
            }
        }
    } while (choice != '6');
}

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        printf("Enter index of appointment to delete: ");
        scanf("%d", &index);
        deleteAppointment(index - 1);
    }
    break;
case '4':
    if (numAppointments == 0) {
        printf("No appointments to search.\n");
    } else {
        char searchName[MAX_NAME_LENGTH];
        printf("Enter name of appointment to search: ");
        scanf("%s", searchName);
        int result = searchAppointment(searchName);
        if (result != -1) {
            printf("Appointment found at index %d.\n", result + 1);
        } else {
            printf("Appointment not found.\n");
        }
    }
    break;
case '5':
    if (numAppointments == 0) {
        printf("No appointments to update.\n");
    } else {
        char updateName[MAX_NAME_LENGTH];
        printf("Enter name of appointment to update: ");
        scanf("%s", updateName);
        int updateIndex = searchAppointment(updateName);
        if (updateIndex != -1) {
            updateAppointment(updateIndex);
        } else {
            printf("Appointment not found.\n");
        }
    }
    break;
case '6':
    printf("Exiting program.\n");
    break;
default:
    printf("Invalid choice. Please try again.\n");
}
} while (choice != '6');
return 0;
}

```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Hello World