C program for hospital management system .

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include<header.h>
//main.c file
//Defining structure
struct patient
{
  char name[20];
  char doctor[20];
  int age;
  char gender[10];
};

int main()
{
  int choice;

  while(1)
  {
    printf("\n\n**Hospital Management System**\n\n");
    printf("1.  display Patients\n");
    printf("2. Add Patient\n");
    printf("3. Search Patient\n");
    printf("4. Delete Patient\n");
    printf("5. Exit\n");
    printf("\nEnter your choice: ");
```

```
   scanf("%d", &choice);

   switch(choice)
   {
     case 1: display _patients();
             break;
     case 2: add_patient();
             break;
     case 3: search_patient();
             break;
     case 4: delete_patient();
             break;
     case 5: exit(0);
             break;
     default: printf("Invalid Choice\n");
   }
  }

  return 0;
}
//display.c file
//Function to list all patients
#include<stdio.h>
#include"header.h"
struct patient
{
  char name[20];
  char doctor[20];
  int age;
```

```
  char gender[10];
};
void display_patients()
{
  FILE *fp;
  struct patient p;
  int count=0;

  fp = fopen("patients.txt", "r");
  if(fp == NULL)
  {
    printf("Error opening the file\n");
    return;
  }
else
{
  fread(&p, sizeof(struct patient),1,fp);
      printf("Name: %s\n", p.name);
      printf("Doctor: %s\n", p.doctor);
      printf("Age: %d\n", p.age);
      printf("Gender: %s\n\n", p.gender);
      count++
    }
  }
  fclose(fp);
}
//add.c file
//Function to add patients
#include<stdio.h>
```

```
#include"header.h"
struct patient
{
  char name[20];
  char doctor[20];
  int age;
  char gender[10];
};
void add_patient()
{
  FILE *fp;
  struct patient p;

  fp = fopen("patients.txt", "a");
  if(fp == NULL)
  {
    printf("Error opening the file\n");
    return;
  }

  printf("Name: ");
  scanf("%s", p.name);
  printf("Doctor: ");
  scanf("%s", p.doctor);
  printf("Age: ");
  scanf("%d", &p.age);
  printf("Gender: ");
  scanf("%s", p.gender);
```

```
  fwrite(&p, sizeof(struct patient), 1, fp);
  printf("\nPatient Added Successfully\n");
  fclose(fp);
}
//search.c file
//Function to search patient
#include<stdio.h>
#include<string.h>
#include"header.h"
struct patient
{
  char name[20];
  char doctor[20];
  int age;
  char gender[10];
};
void search_patient()
{
  FILE *fp;
  struct patient p;
  char name[20];
  int found = 0;
  fp = fopen("patients.txt", "r");
  if(fp == NULL)
  {
    printf("Error opening the file\n");
    return;
  }
  else
```

```
{
  printf("Enter name to search: ");
  scanf("%s", name);
    fread(&p, sizeof(struct patient), 1, fp);
      if(strcmp(p.name, name) == 0)
      {
        printf("Name: %s\n", p.name);
        printf("Doctor: %s\n", p.doctor);
        printf("Age: %d\n", p.age);
        printf("Gender: %s\n\n", p.gender);
        found = 1;
      }
    }
    if(found == 0)
    printf("Patient not found\n");

  fclose(fp);
}
//Function to delete patient
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
#include"header.h"
struct patient
{
  char name[20];
  char doctor[20];
  int age;
  char gender[10];
```

```
};
void deletePatient()
{
  FILE *fp;
  struct patient p;
  char name[20];
  int found = 0;

  fp = fopen("patients.txt", "r");
  if(fp == NULL)
  {
    printf("Error opening the file\n");
    return;
  }
  else
{
  printf("Enter name to delete: ");
  scanf("%s", name);
 fread(&p, sizeof(struct patient), 1, fp);
      if(strcmp(p.name, name) == 0)
      {
        printf("Name: %s\n", p.name);
        printf("Doctor: %s\n", p.doctor);
        printf("Age: %d\n", p.age);
        printf("Gender: %s\n\n", p.gender);
        found = 1;
      }
    }
    if(found == 0)
```

```
   printf("Patient not found\n");
  else
  {
   fp = fopen("patients.txt", "r");
   FILE *tmp;
   tmp = fopen("tmp.txt", "w");
    fread(&p, sizeof(struct patient), 1, fp);
      if(strcmp(p.name, name) != 0)
       fwrite(&p, sizeof(struct patient), 1, tmp);
   fclose(fp);
   fclose(tmp);
   remove("patients.txt");
   rename("tmp.txt", "patients.txt");
   printf("\nPatient Deleted Successfully\n");
 fclose(fp);
}
//Makefile
Main: display.o add.o search.o delete.o
       gcc display.o add.o search.o delete.o -o Main
display.o: display.c header.h
      gcc -c display.c
add.o: add.c header.h
     gcc -c add.c
search.o: search.c header.h
     gcc -c search .c
delete.o: delete.c header.h
     gcc -c delete.c
main.o: main.c header.h
     gcc -c main.c
```