İstanbul Aydın University

COMPUTER PROGRAMMING

Final Project Report

HOSPITAL MANAGEMENT SYSTEM IN C

ABDULFETTAH SANCAKLI

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1 INTRODUCTION

This section should provide an overview of the entire document and a description of the scope of the system and its intended usage. The scope should also describe external interfaces to the system, external dependencies and provide a brief overview of the 'characteristics' of the system, commenting on aspects such as real-time use, security considerations, concurrency of users etc.

My project is a basic hospital management system in C programming.

There are many properties inside it.We can record the informations of patients and there are some operations inside it for updating the informations, this project can used for learning the structure of a hospital system. There are the details below.

Firstly there is a constructor for recording patients and the function called add_patient keeps patients records with below format:

IDnumber, name, address, bloodType, gender, contactPersonName, phone_no;

2 PROJECT DESIGN.

This section should briefly introduce the system context and design, and discuss the background to the project. This section may also summarise the costs and benefits of the selected architecture, and may refer to feasibility studies and prototyping exercises.

The description of the system should be given in terms of the Architecture of the solution that is being implemented with high level data flows described to set the context of the system, i.e. to look at its external interfaces. This section should also set out to 'characterise' the system describing aspects of its operation that indicate if the system has, inter alia:

2.1 PROGRAMMING AND CODE MODULES

This section should define the project programming standards. Whatever languages or standards are chosen, the aim should be to create a convenient and easily usable method for writing good-quality software. If an application development tool is used there may be other conventions that need to be defined, e.g. colour schemes.

When programming in any new language, a standard for its use should be written to provide guidance for programmers. This standard may be referenced or included here.

#1 ***At this stage of our project, I would like to evaluate the two parts that we will focus on.As we know,part of the foundation of the project design is the background,the methods we use, and what these methods do is an important point, when any user wants to access the project, I want to talk about the points that I have clarified in a way that makes it easier for the program to understand.***

#2 ***At the beginning of this program, details such as first name, last name,blood type, gender and patient contact information are included.I created a struct to identify them all.***

#3 ***After that our interface meets us, I used the setcolorandbackground constructor function to create the color and background during the design phase.***

#4

#5 ***Clear window function also has screen cleaning function, we can say that it works as follows: after entering the necessary information, if the patient is asked to switch to a different feature, it performs the task of cleaning the current screen.***

#6 ***We can also customize the position of our interface with the gotoxy function and the font colors with the help of the set color function so that we can design the information that is at the beginning of our interface and include it in our void window function.***

#7

#8 ***I would like to mention some functions that I will then refer to their structure.There are functions for file operations in the option of adding patients , we have determined our coordinates with gotoxy.At this stage, the information we received***

from the patient was stored in their own storage areas using the gets feature, allowing the information to be easily retrieved via the patient object.

#9 ***In our function, which explores the details of our patients, we check whether they have information in our system with isFound feature.We access the information of our patients and the functions that enable the research by using the Pat object consisting of the struct structure we call patient.***

#10 ***In our function, which allows some changes to patients ' information and their own accounts, we confirm that the match is the same person using the isFound feature we used earlier.Other functions that are intended to change the information in the accounts in which the patients are registered are accessed through the Pat object that we have created from the structure that we have created as patient.***

#11 ***In the function that helps us delete the accounts of the patients included in our hospital system, we check that the patient matching the isFound feature is the right person.After these procedures, we can read the file in which the patients are registered with the fopen function and then perform the deletion of the person we want to delete from the file.We use the fclose function to close the file after completing the operations.***

Our Main function is a function that controls the entire program.To use the properties in our interface,we have defined them in the switch case functions in our main function, and then we can use the properties with the execution of the selected function.

3 CONCLUSION

3.1 IMPLIMENTATION PROCESS

Explain all parts of your code and all menus that you use in this program.

There are some switch case operations which have add, modify,search and delete functions in the main window function that created before. We have inserted those qualities to the interface with the gotoxy function to do these switch case operations which seem in the display functions. Each of those functions executes corresponding to the choice from the switch case. We have set which of these screen interfaces you can achieve according to the asking from the switch case.

```
/1    void main_window(){
/2       int choice;
/3       SetColor(28);
/4       int x = 2;
/5       while(1){
/6          gotoxy(x,8); printf("1. Record Patient");
/7          gotoxy(x,10);printf("2. Search Patient");
/8          gotoxy(x,12);printf("3. Modify Patient Record");
/9          gotoxy(x,14);printf("4. Delete Patient");
/10         gotoxy(x,20);printf("5. Exit");
/11         gotoxy(x,22);printf("Enter your choice: ");
/12         scanf("%d",&choice);
/13         switch(choice){
/14            case 1:
/15               add_patient();
```

After those informations were taken from the patients, we have the details about people like their names, adresses, genders, phone number etc. If we want to keep going, we could see the array for the structure of given details about new patient and we keep the patient record to the file that we defined earlier, and the process of adding will complete successfully.

```
/16               break;
/17            case 2:

/18               search_patient();
```

/19 Our main goal in our Search function, to gain knowledge of the patients we have added to the system before. In order to access the information of these people, we ask the patient who entered the TC ID number of the person whose health information we added. The patient records the add function after this procedure. We questioned whether it was registered in the txt file . Before performing these operations, we have obtained the necessary functions for File Operations. In addition, if the person added is registered in the file, we showed this patient's information to the logged-in patient by pressing the screen.If the patient is not registered in the database, such a patient is registered in our system. we told this person it wasn't.

```
/20             break;
/21         case 3:
/22             modify_patient();
```

/23 In our modify function, our goal is to create a structure that provides this opportunity to patients who have previously registered in our system and who want to update their personal information.We have developed a function to implement these operations.We want to access the information by requesting the identification number of the patient with whom we will change this function first.We can then compare the ID number with our registered patients in our file containing the information and access the personal information of the patient whose ID number matches.Identification number, name, address change of patient information, we update the information requested to be updated, such as contact information.After this process, we save the updated information to the file and update it as requested.

```
/24             break;
/25         case 4:
/26                 delete_patient();
```

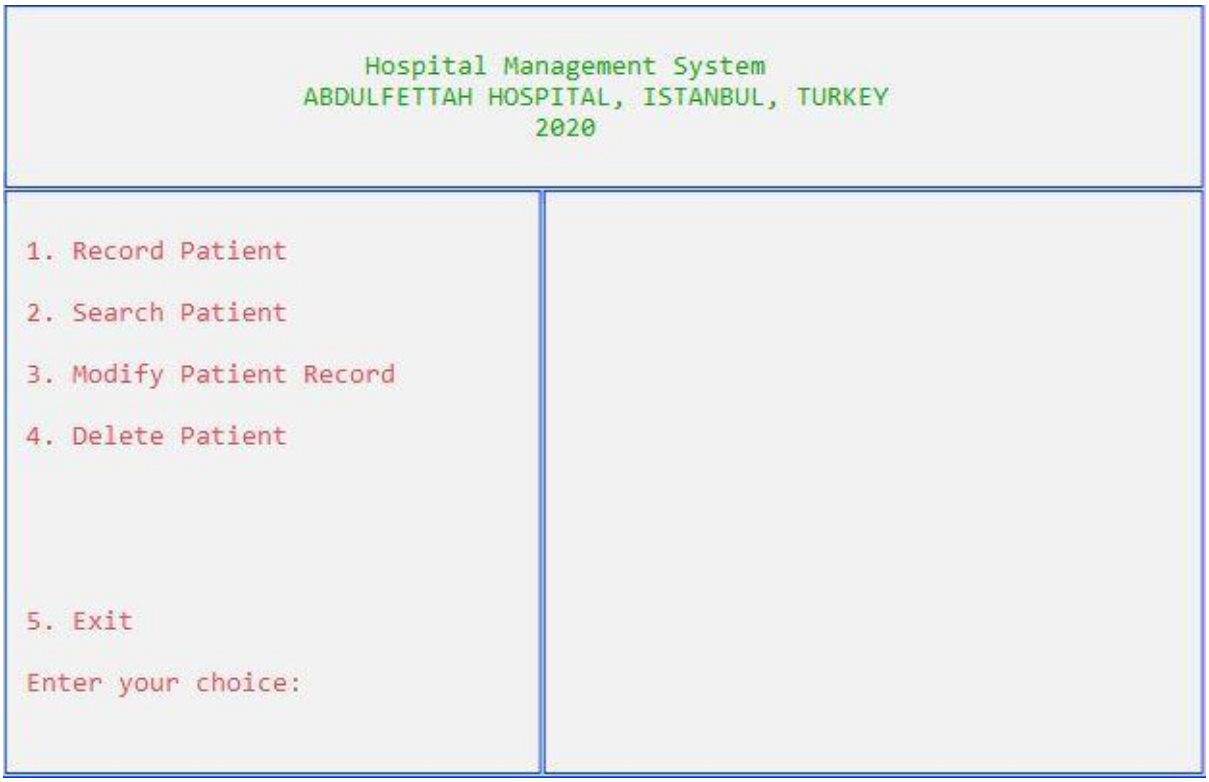
/27 We can perform the Delete function with the help of the remove function, which is registered in our database and the information of the patients that we want to delete from the system.While doing this, we access the information of our registered patient with the identity number and delete the information of our registered patient in that way .

```
/28             break;
/29         case 5:
/30             exit(0);
```

```
/31                 break;
/32             default:
/33                 break;
/34         }
/35     }
    }
```

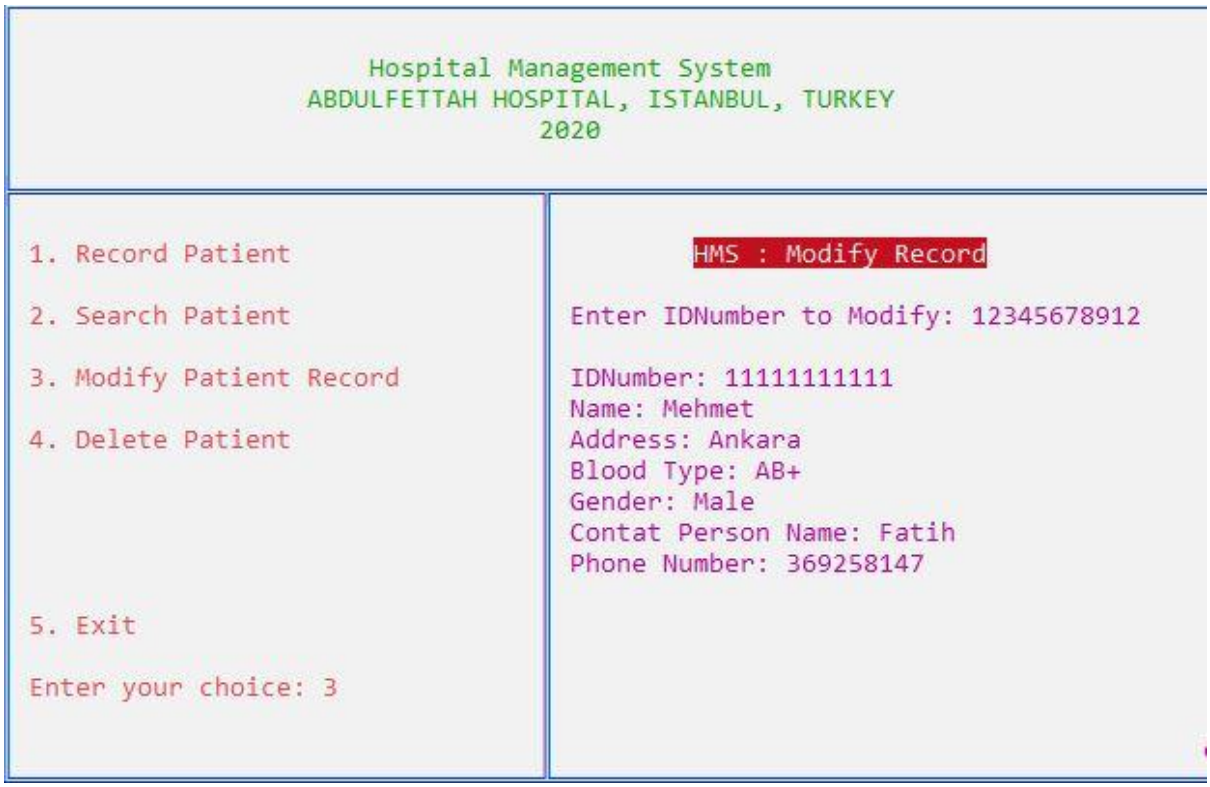
3.2 OUTPUTS

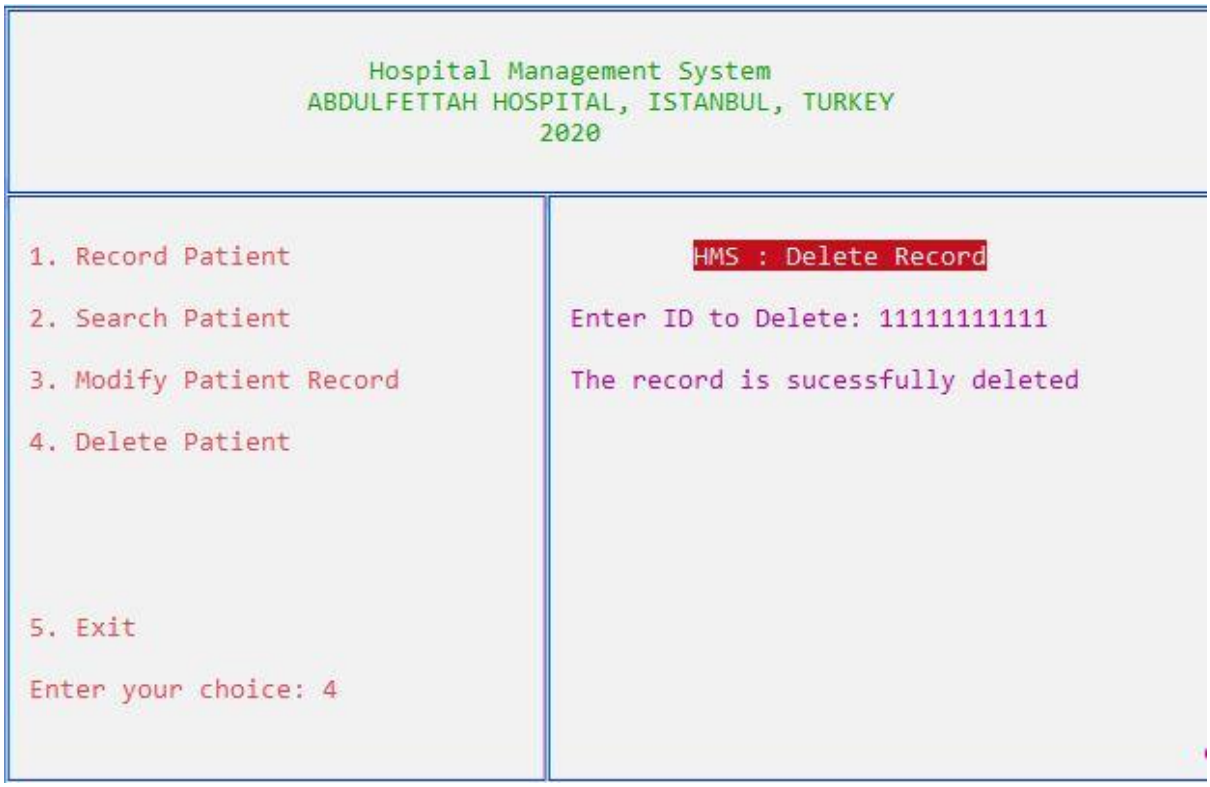
Take some captures of your outputs.




Hospital Management System
ABDULFETTAH HOSPITAL, ISTANBUL, TURKEY
2020
1. Record Patient
2. Search Patient
3. Modify Patient Record
4. Delete Patient
5. Exit
Enter your choice: 1
HMS : Add Record
IDNumber: 12345678912
Name: Abdulfettah
Address: Istanbul
Blood Type: A+
Gender: Male
Contact Person Name: Fatih
Phone Number: 147258369
Abdulfettah's record is sucessfully added


Hospital Management System
ABDULFETTAH HOSPITAL, ISTANBUL, TURKEY
2020
1. Record Patient
2. Search Patient
3. Modify Patient Record
4. Delete Patient
5. Exit
Enter your choice: 2
HMS : Search Record
Enter IDNumber to Search: 12345678912
The record is Found
IDNumber: 12345678912
Name: Abdulfettah
Address: Istanbul
Blood Type: A+
Gender: Male
Contat Person Name: Fatih
Phone No: 147258369


Hospital Management System
ABDULFETTAH HOSPITAL, ISTANBUL, TURKEY
2020
1. Record Patient
2. Search Patient
3. Modify Patient Record
4. Delete Patient
5. Exit
Enter your choice: 3
HMS : Modify Record
Enter IDNumber to Modify: 12345678912
IDNumber: 11111111111
Name: Mehmet
Address: Ankara
Blood Type: AB+
Gender: Male
Contat Person Name: Fatih
Phone Number: 369258147


Hospital Management System
ABDULFETTAH HOSPITAL, ISTANBUL, TURKEY
2020
1. Record Patient
2. Search Patient
3. Modify Patient Record
4. Delete Patient
5. Exit
Enter your choice: 4
HMS : Delete Record
Enter ID to Delete: 11111111111
The record is sucessfully deleted