

DOCTOR'S PORTAL & MEDICAL SERVICES

BY

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APPROVAL

This Project titled “Doctor’s Portal & Medical Services” submitted by “Coder’s Strikes” consists of Md. Sajjadur Rahman, Khadiza Akther, Md. Abdul Muhyemin Al Syed and Humayra Kabir Nisa to the Department of Computer Science and Engineering (CSE), Leading University, has been accepted as satisfactory for the partial fulfillment of the requirements for the course code: “Cse-2118”, course title: “Computer Algorithm & Complexity Lab” and approved as to its style and contents. The presentation has been held on 26, JUNE 2021.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Md Saidur Rahman Kohinoor, Lecturer, Department of CSE**, Leading University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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I also thanks to our team members for works together with full of passion and works hard to make our project complete on time. This Project couldn't be complete without the effort and cooperation of our team members.

.

ABSTRACT

Our project is about “**Doctor Portal & Medical Services**” has four parts. These are Doctors Information & Tickets Buy, Medicine Categories & Price, Test Place & Price and Ambulance Services.

Doctor information & tickets buy has two sub sections, 1. Hospital List and 2. Tickets History. In these part where they will show the name of some hospitals list and different fields of doctors (like Medicine specialist, Cardiologist, Dentist etc.) And doctor information of each of the fields, also the ticket buying.

Second one show the list different categories medicine and each medicine price , also purchase history.

Third one show the medical test list, test price and available place. (This section is able to show three nearest medical or diagnostic center as well as far).

Fourth one show how much service fee will be required for ambulance service (Home to Hospital & Hospital to Home also from a fixed destination).

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The project Doctor's Portal & Medical Services is an information based program. In this project we have developed four features where the user can easily get information and consult with doctors. These are hospital list and doctor's info, medicine list and price also purchase history, medical test and price also near medical & diagnostic center and finally ambulance services (Home to hospital & hospital to home). It's totally depends on information and some calculation for buying medicine and tickets and also cost for ambulance services where the user can easily get benefited. Hopefully our project will play an important role for provides correct information.

1.2 Motivation

Ours project motto: **“SAVE LIFE, SAVE NATION”**. Bangladesh is a developing country, where is lack of treatment development. Nowadays people are completely depends on medicine. Also most of the rural people are deprive from the advance of medicine facilities due to lack of correct information. Our intention to provide to exact information for those who have no idea about how to find doctor's information. Moreover, they will know when the doctor will come and also they will be able to get information very easily about tickets at any time and the exact price of the tickets. Also the user will be able to know the information of medicine list as well as medicine price of each tablet. Whenever user want to about the given test by doctor where they can easily do it or which medical centre are appropriate for it. A number of people suffering it, when they need an emergency ambulance services for the patient, but they do not find it. In terms of it, it will show how much the user will spend to take the service (Home to Hospital or Hospital to Home). Hopefully this project will play a vital rule for everyone.

1.3 Objectives

Nowadays it is rare to find accurate information from anyone. In this modern technology the purpose of our project is to provide proper and correct information for user who have no idea about the doctor portals. Using this project they can find out accurate information about doctors, tickets buying and ticket price, medical test and price, ambulance services. This program will provide all kinds of information in a short time. This program will play a key role for generating general knowledge and this project will saves user's time.

Goals

1. It will provides proper and correct information.
2. It will help to save users time.
3. It will provides better understand about registration/login for any purpose.
4. It will provides user to know the exact time & prices of buying medicine and tickets.
5. It will help user to getting a general knowledge about doctor's portal and medical services.

CHAPTER 2

BACKGROUND

2.1 Project Planning

Generating Idea

At first, when we discussed the project ideas among our team-mates. There appeared many miscellaneous ideas like office management system, Doctor's Portal and Medical Services, Restaurant Management System.

After all, we decided to propose two ideas to our respectable teacher Md. Saidur Rahman Kohinoor as Doctor's Portal and Medical Services and Restaurant Management System. He suggested us to build our project on Doctor's Portal and Medical Services.

First, we planned to collect information for Doctor's portal and Medical list. We gathered information of doctors list, medicine list with price, medical test list with price and available diagnostic centers, ambulance service from different hospitals with costs. Our target was finding available doctors information and medical test list alongside medicine and ambulance service. Secondly, we learnt how to calculate medicine price for different amount. At last, we converted that knowledge into code. Therefore we shaped the project.

2.2 Relevant study & findings

We searched many things and learned to make our project more user friendly , interesting and decorated the console for good impression. Here the some keyword's

1. How to remove given index from Array
2. How to store value in Array from different functions
3. How to use Sleep() function for character animation
- 4 .How to change background color & console closed
5. How to control several files and functions & structure

2.3 Challenges

Firstly, the most challenging part was merged the whole project and, finding error and solve it. Secondly, maintain multiple array with a time and remove index from array.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Requirement Collection and Analysis

Logical Data Model/Flowchart/Pseudocode

Character Animation:

- Step - 01: Start
- Step - 02: Store string in a Character Array.
- Step - 03: Run a loop to continue for million or required times and close.
- Step - 04: call Sleep (number) function for iteration and print string
- Step - 05: End

Registration:

- Step - 01: Start
- Step - 02: Open a file in append mode
- Step - 03: If file is NULL, File doesn't exist.
- Step - 04: Store data to the opened file.
- Step - 05: Close file
- Step -06: End

Log In

- Step - 01: Start
- Step - 02: Input User id and Password
- Step - 03: Declare temp == 0 and Compare these with registration File.
- Step - 04: if match make temp = 1 and break
- Step - 05: If temp == 0, repeat Step – 02, else
Go to the next Function.
- Step -06: End

Part-01: Medical Service

Step-01: Start

Step -02: Keep require information to a FILE.

Step-03: Read the FILE. IF data is missing, show data is missing and then Exit.

Step -04: Select an option according to FILE data.

Step -05: Repeat step -05 and step -06 Until Press back

Step -06: Choice a medical through the FILE data

Step -07: Check all doctor biography

Step -8: End

Part-01: Ticket Buying

Step-01: Start

Step -02: Keep require information to FILE.

Step-03: Read the FILE. IF data is missing, show data is missing and then Exit.

Step -04: Select an option according to FILE data.

Step -05: Repeat step -05 and step -06 Until Press back. Else, Exit.

Step -06: Choice a doctor & read is biography. If it is ok, go Step -7. Else, continue.

Step -07: keep doctors code and index number store two integer Array. If you want to buy more ticket, go to step show data is missing and then Exit.

Step -8: End

Part-02: Medicine Categories & Prices

Step-01: Start

Step -02: Keep all medicine categories and price information to FILE.

Step-03: Read the FILE. If FILE is NULL, print file is missing and Exit.

Step -04: Select an option according to FILE data.

Step -05: Repeat step -05 and step -06 until close the function

Step -06: Select categories and see price of medicine

Step -07: If buy medicine, collect medicine code and quantity to different Array.

Step -8: End

Part-02: Purchase History

Step-01: Start

Step -02: Follow same all steps Medicine categories and price

Step-03: Run a loop which limit is equal total medicine [total index of Array] Each line print code, categories price, quantity and total amount of medicine.

Step -04: If user want to remove item from list go to next step, Else Exit.

Step -05: input the position and loop run same step 3 and increase Array index + 1 from position.

Step -06: Decrease Array index - 1 and call Step - 03.

Step -7: End

Part -03 : Test Place and Price

Step - 01 : Start

Step - 02 : Keep all test categories and price to FILE

Step - 03: Read file . If it is NULL , show the file is missing .

Step -04 : Repeat the step -05 until close the functions

Step -05 : See all test categories and price . If add test in list keep test code in a Array .

Step - 06 : If need to add more test in list go to step- 04

Step - 07 : Exit .

Part -03 : Test Purchase

Step-01: Start

Step -02: Follow same all steps Medicine categories and price

Step-03: Run a loop which limit is equal total medicine [total index of Array]

Each line print code, categories price of test .

Step-04: Exit.

Part-03 : Location (Test Place)

Step - 01 : Start

Step - 02 : Set some locations, medical name and diagnostic center .

Step - 03: Select an option according to step 02 .

Step -04 : If option is match with data then show three near medical and diagnostic center as we as far one . Else, show wrong choice .

Step - 05 : If want to know more test place go to step -03

Step - 06 : Exit .

Part-04 : Ambulance Services

Step - 01 : Start

Step - 02 : Set some locations, medical name .

Step - 03: Select an option (1. Home to Hospital 2. Hospital to Home .)

Step - 04 : If option == 1 then go to Step - 05

Step -05 : Select your location and the chose a Hospital . If data match show the service charge of Ambulance .

Else , go to step - 0 3

Step -06 : Select at first Hospital Name and then your location . If data match show the service charge of Ambulance .

Else , go to step - 03

Step -07 : Input your destination , it will calculate the service charge .

Step - 06 : If want to know more go to step -03

Step - 07 : Exit .

CHAPTER 4

IMPLEMENTATION AND TESTING

4.1 Implementation of Database (file)

FILE is a used for collecting and storing data in to the system so that the stored data can be reused in other work. Here, we used FILE for storing patient name ,gender ,phone number and so on . some personal data of a student. We also used FILE for stored information in our project for several Functions (All Doctor's name , Medical Name list , Medicine categories & Price , Test categories and prices)

4.2 Testing Implementation (output analysis)

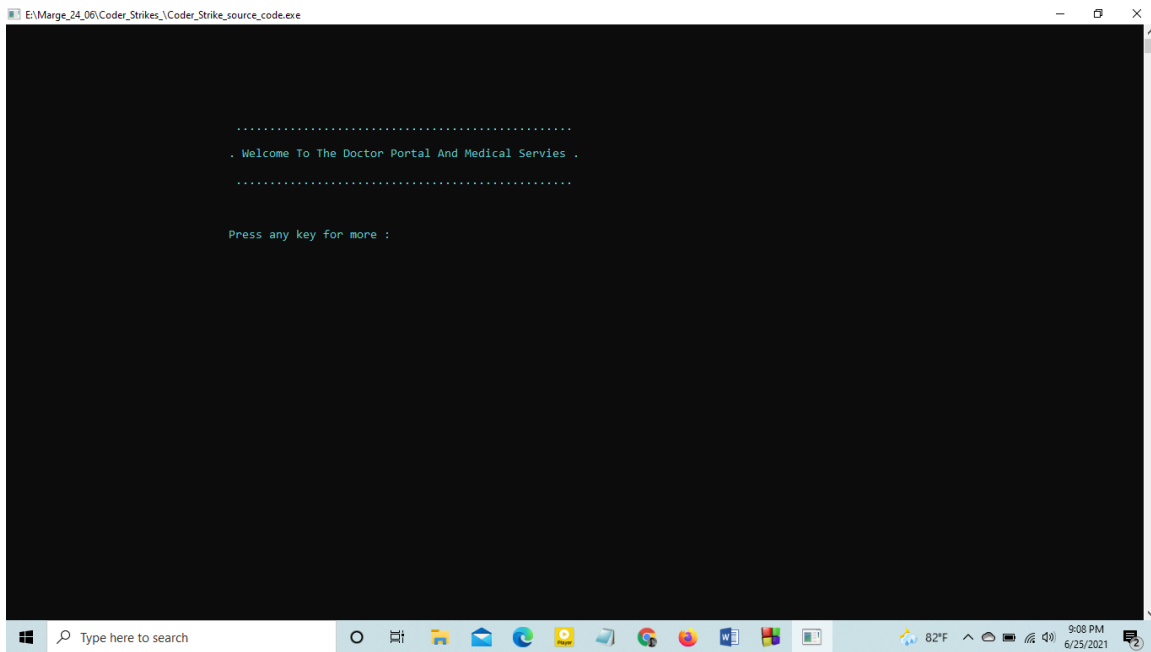


Figure-01: Beginning -01 of the project
That print a welcome message with help of character animation


```
E:\Marge_24_06\Coder_Strikes_\Coder_Strike_source_code.exe

1. ABOUT WORK
2. START
3. EXIT
Choice Option :
```

Figure-02: Beginning -02 of the project
Here the journey of our project

```
E:\Marge_24_06\Coder_Strikes_\Coder_Strike_source_code.exe

[---About project---]

Our project is about Doctor Portal & Medical Services has four parts.
These are DoctorsInformation & Tickets Buy, Prices of Medicine, Medical Test & Test Price and Ambulance Services.
Doctor Information & tickets buy has two sub sections, 1. Hospital List and 2. Tickets History.
In these part where they will show the name of some hospitals list and different fields of doctors (like Medicine specialist, Cardiologist, Dentist etc.)
And doctor information of each of the fields, also the ticket buying .
Second one show the list of groups of medicine and each medicine prices.
Third one will show the medical test list , test price and available place
(This section is able to show three nearest medical or diagnostic center as well as far).
Fourth one will show how much service fee will be required for ambulance service (Home to Hospital & Hospital to Home).

'0' for Back :
```

Figure-03: About of the project
It showed how idea came and what we did in our project. It's about our works,

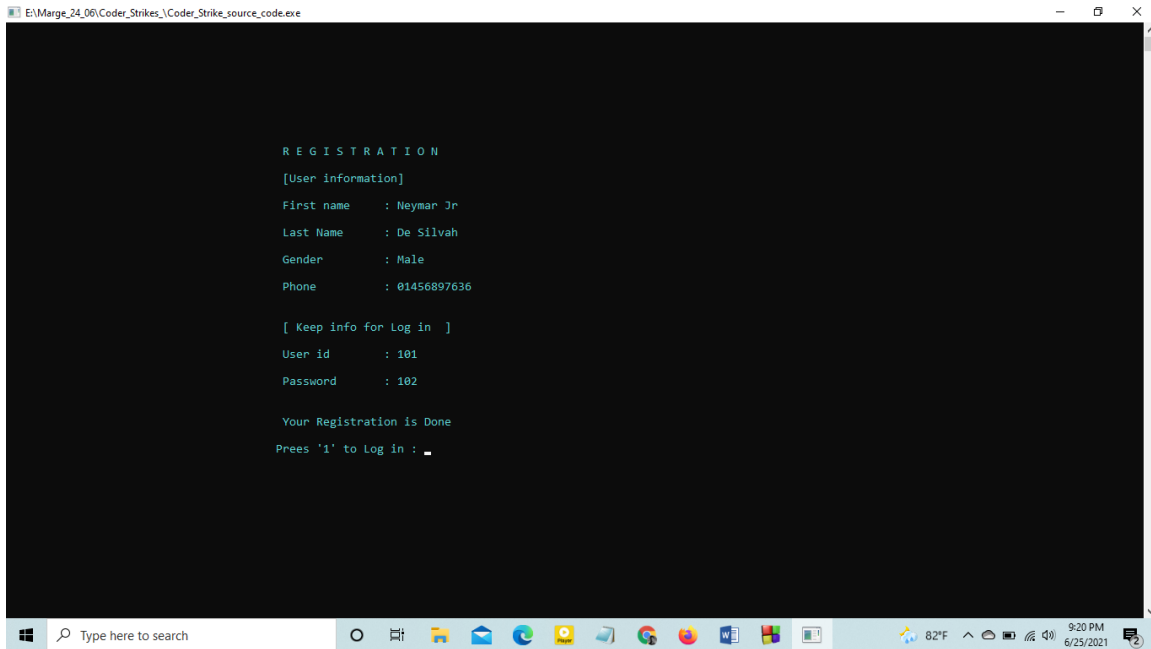


Figure-04: Registration Complete

For log in and see more features to keep information at first

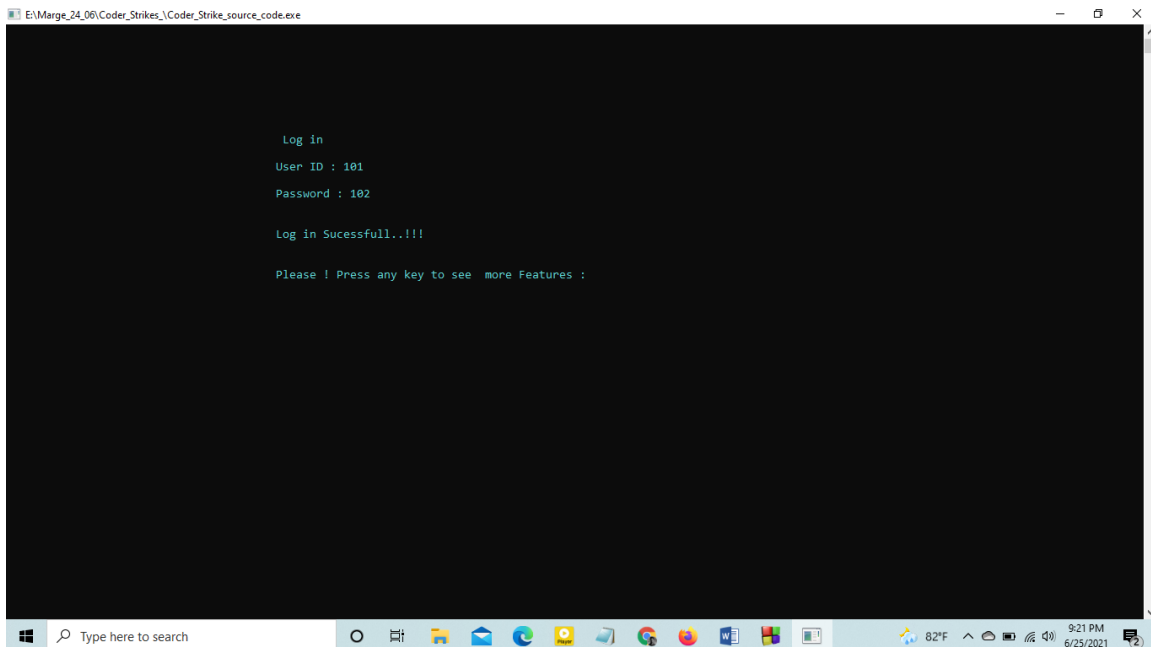


Figure-05 Log In

For log in and see more features to keep information at first

```
E:\Marge_24_06\Coder_Strikes_\Coder_Strike_source_code.exe
1. Doctor's Infromation & Ticket Buy
2. Medicine Categories & Price
3. Test Place & Price
4. Ambulance Services
'0' for Back :
Choice A Option :
```

Figure-06: Features of our project
The main part of our work for this project

```
E:\Marge_24_06\Coder_Strikes_\Coder_Strike_source_code.exe
1. AL HARAMAIN.
2. POPULAR.
3. MOUNT ADORA.
4. OASIS.
5. IBN SINA.
6. PARK VIEW.
'0' For Back :
Choice Option =
```

Figure-07: Medical List of Part - 01

```
E:\Marge_24_06\Coder_Strikes_\Coder_Strike_source_code.exe
1. G Y N A E & O B S .
2. M E D I C I N E .
3. C R I T I C A L   C A R E .
4. P A T H O L O G Y .
5. A N E S T H E I O L O G Y .

'0' for Back :
Choice Option = _
```

Figure-08: Medical Filed

```
E:\Marge_24_06\Coder_Strikes_\Coder_Strike_source_code.exe
G Y N A E
1. PROF. DR. Shamsun Nahar Begum (Hen) .
2. DR. Lubna Yesmin .
3. DR. Dipu Das .
4. DR. Rabeya Nashrin .
5. Buy a Ticket .

'0' for Back :
Choice Option = _
```

Figure-09: Doctor's Name

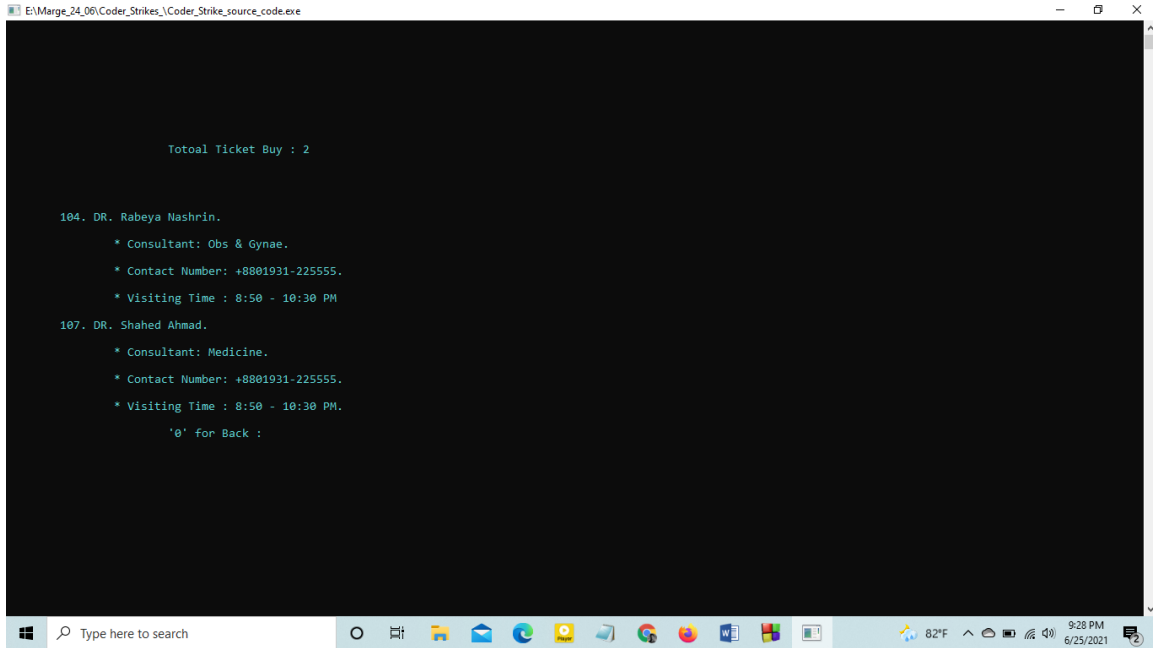


Figure-10: Ticket History
Here it shows how much ticket buy a user

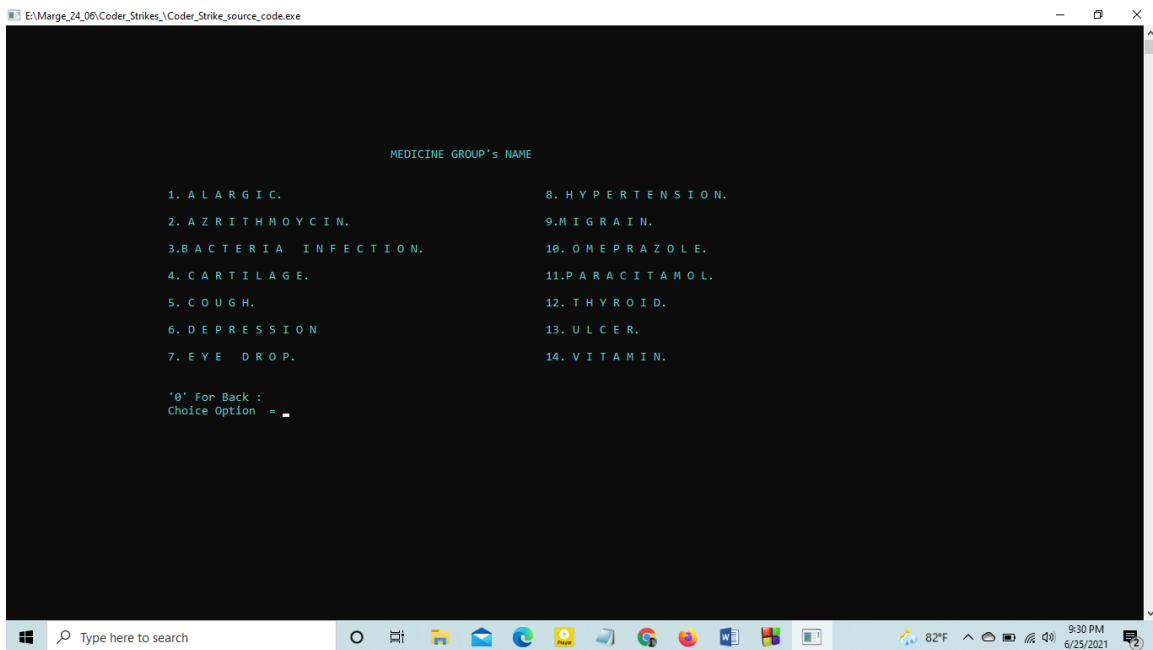


Figure-11: Medicine Categories

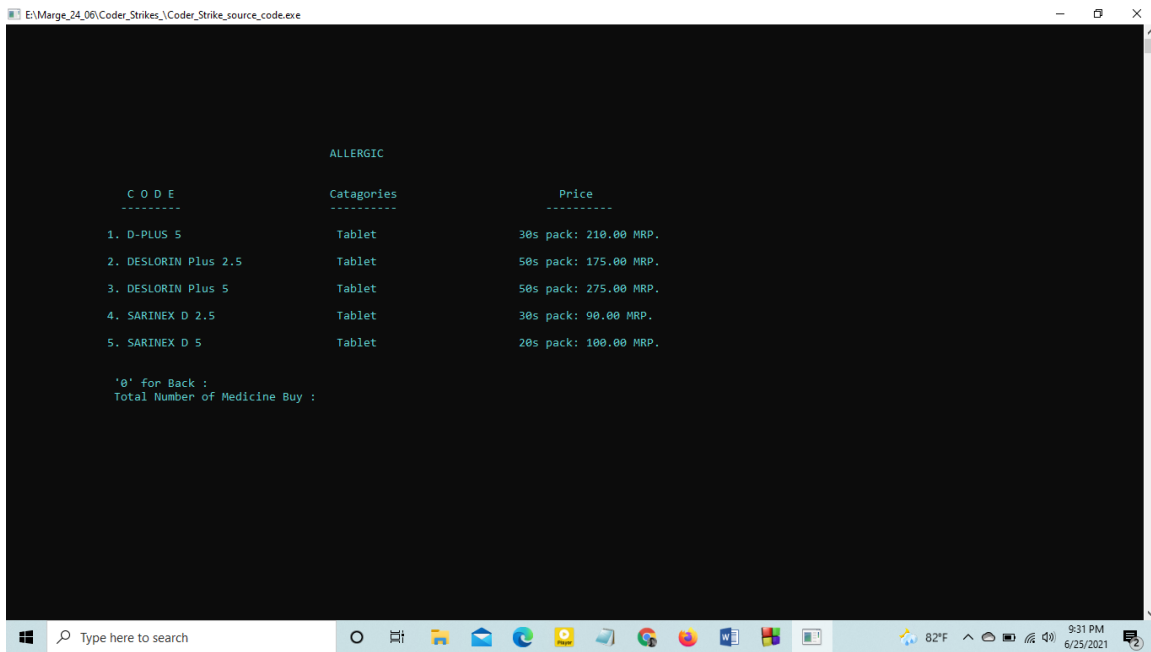


Figure-12.1: Medicine Name and Price

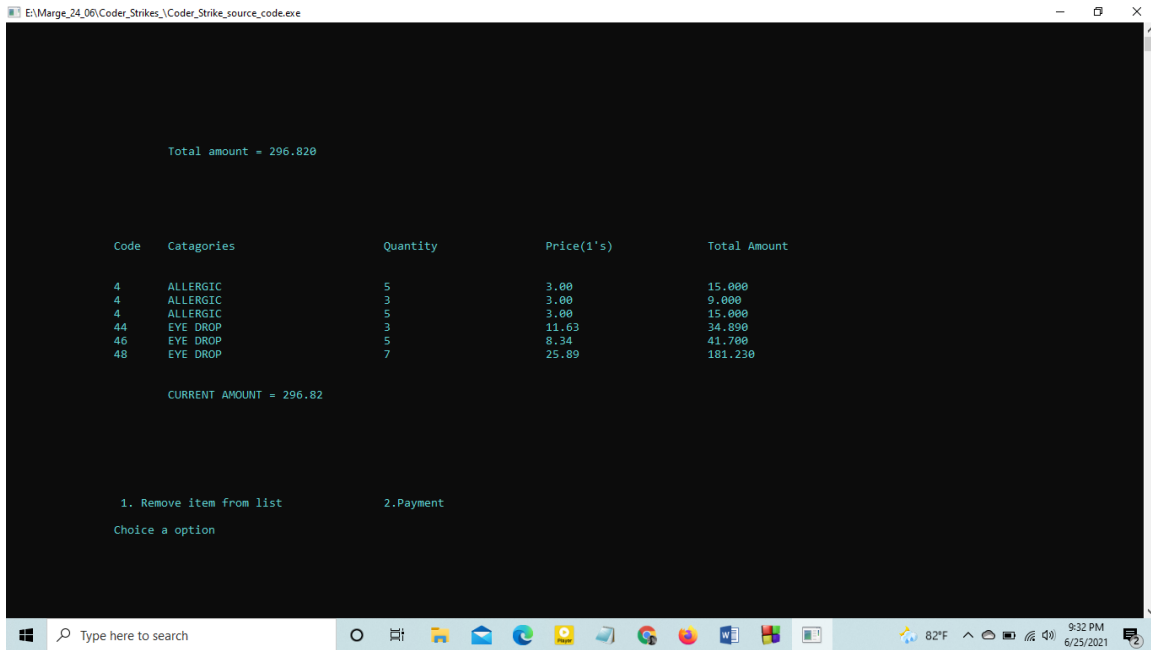


Figure-12.2: Purchase History

```
E:\Marge_24_06\Coder_Strikes\Coder_Strike_source_code.exe

1. Remove item from list          2.Payment
Choice a option 1
Enter Position : 2

Update List

Previous Price : = 296.820

Code  Catagories          Quantity  Price(1's)  Total Amount
4     ALLERGIC              5         3.00        15.000
4     ALLERGIC              5         3.00        15.000
44    EYE DROP              3         11.63       34.890
46    EYE DROP              5         8.34        41.700
48    EYE DROP              7         25.89       181.230

CURRENT AMOUNT = 287.82

1. Remove item from list          2.Payment
Choice a option
```

Figure-12.3: Remove one item from list

```
E:\Marge_24_06\Coder_Strikes\Coder_Strike_source_code.exe

1.B-kas
2.Rocket
3.Nagad
4.Card
Enter Choice : 1

Please wait a While.....
Enter Your B-kas Number : 1
Enter your Pin Number : 3
Thank You For your Payment

'0' for Back : _
```

Figure-13.1: Payment of Medicine

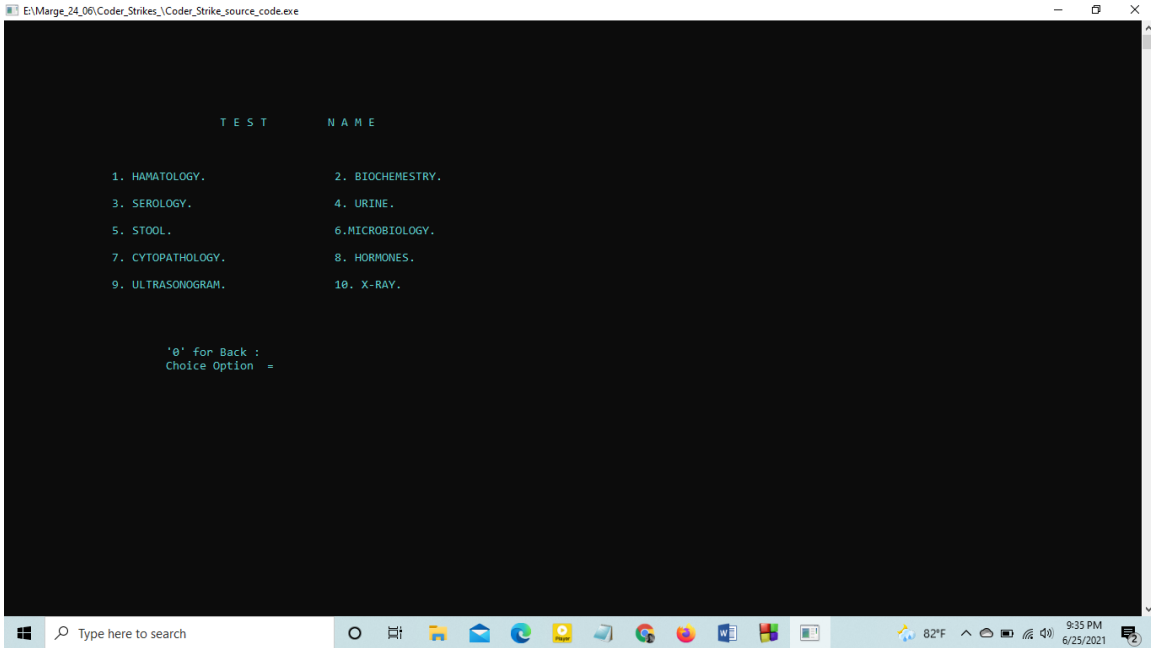


Figure-13.2: Test Categories

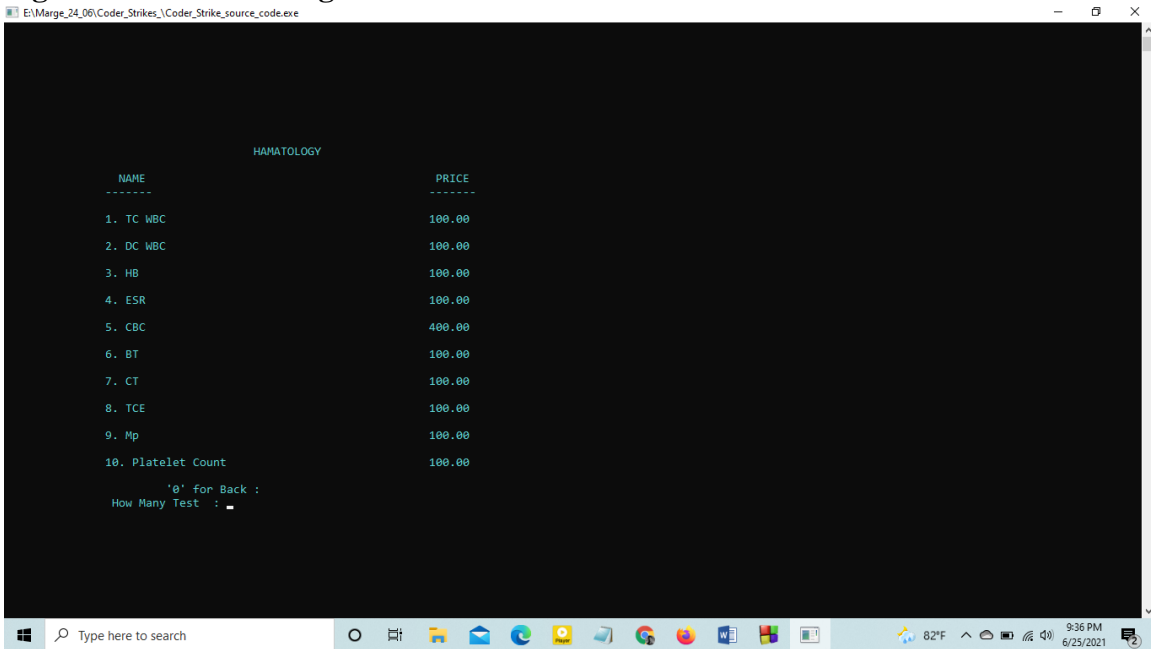


Figure-14: Test name and Price

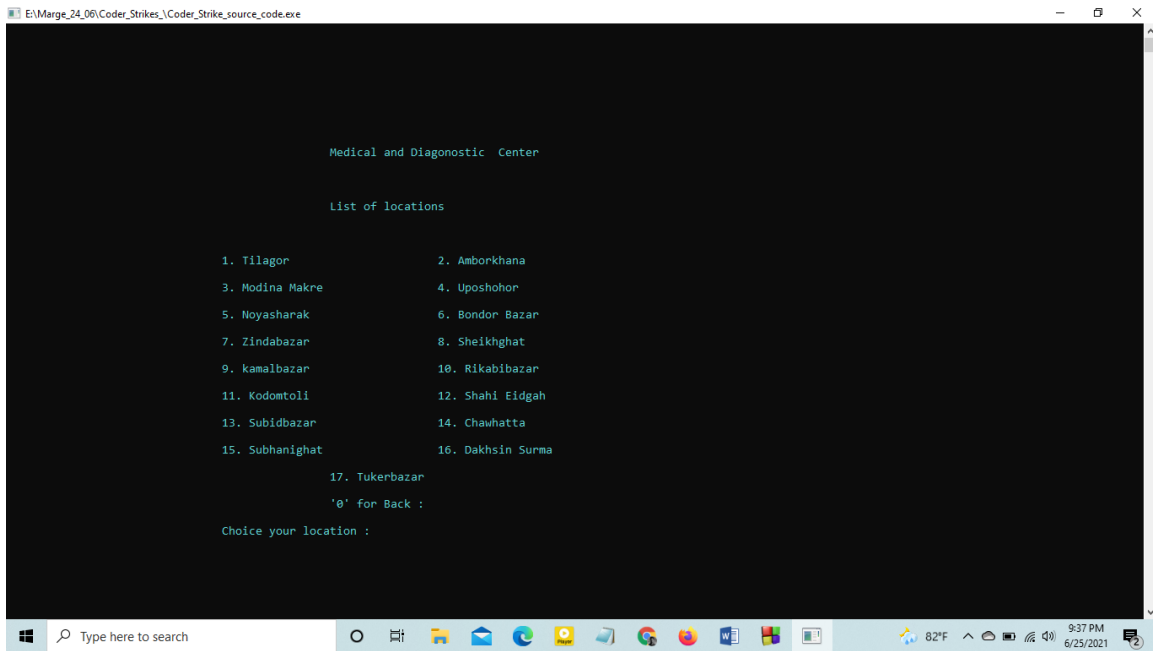


Figure-15 : Locations for Test place

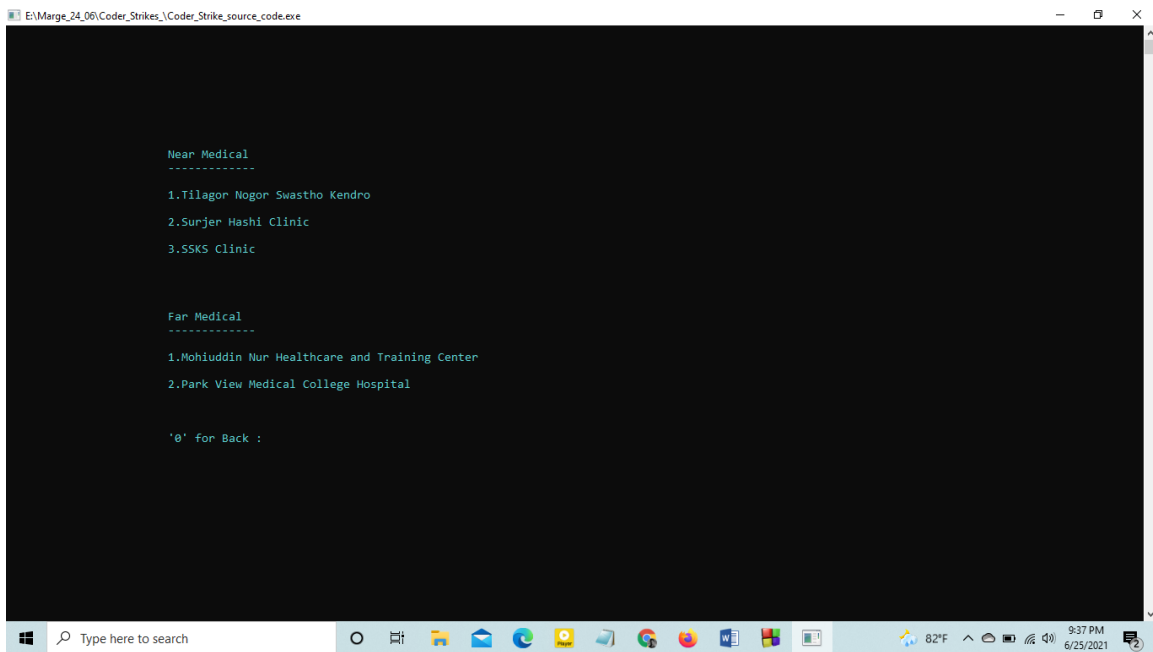


Figure-16 : Aavailable Test place show

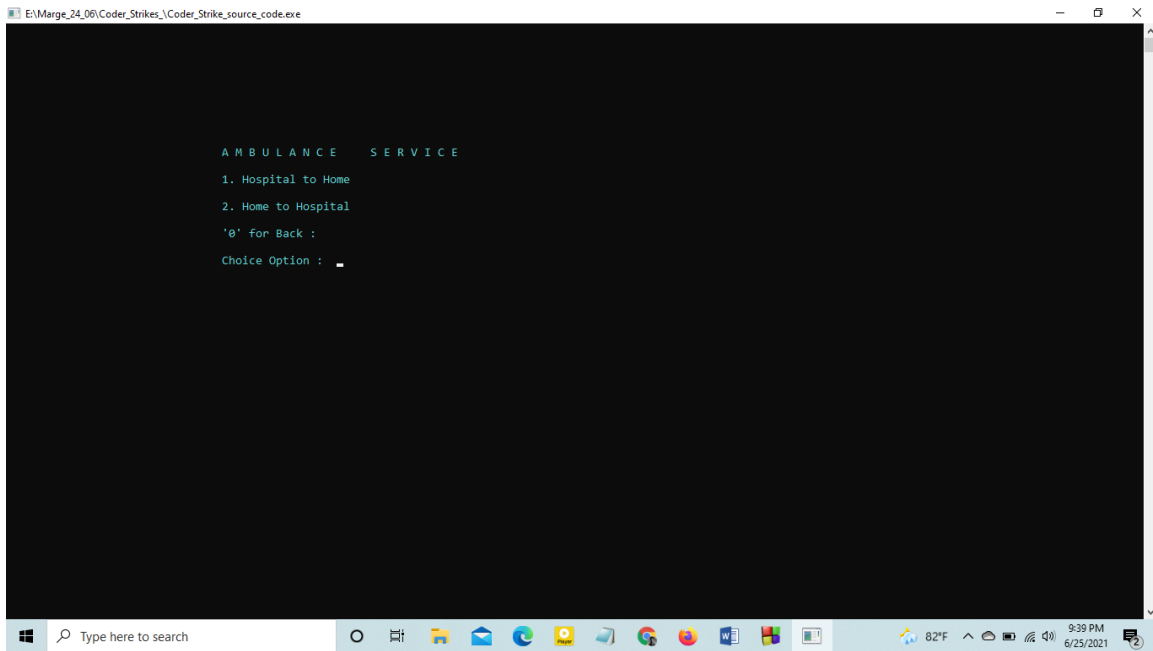


Figure-17 : opening part of Part 04

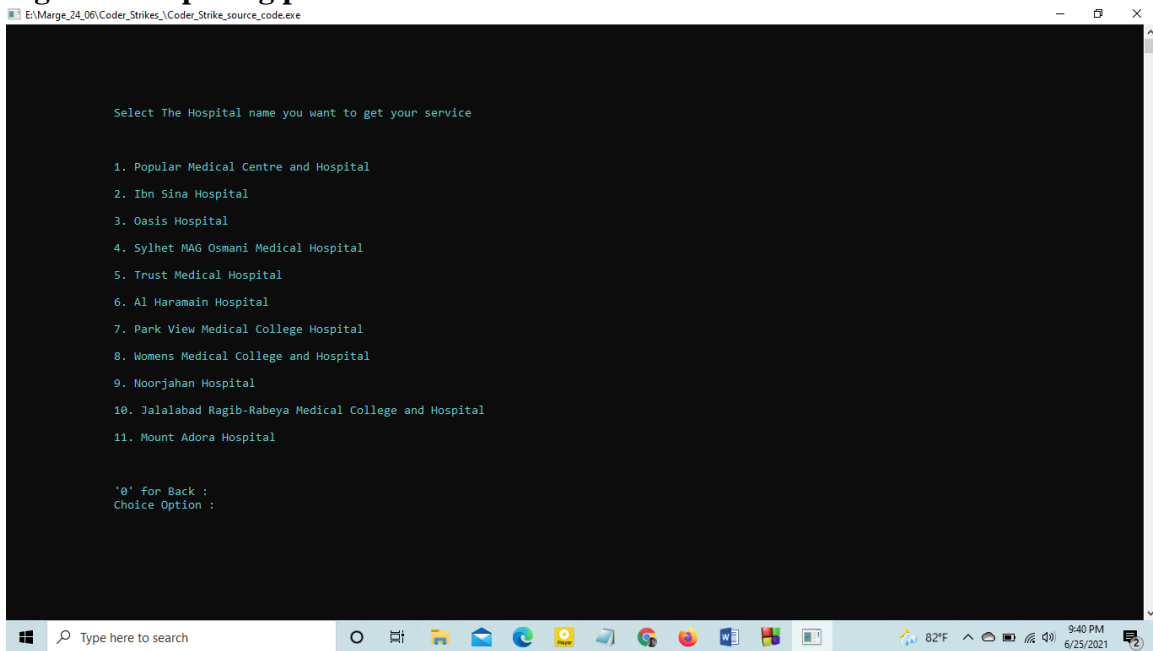


Figure-17 .1: Select Hospital

```
E:\Marge_24\00\Coder_Strikes\Coder_Strike_source_code.exe

This is Mount Adora Hospital's ambulance service.
Its service available 24 hours everyday.
Call for Booking : 01715-084078
Ambulance reserve charge- 1600 Tk

Select The Location you want to go:
1. Modina Market
2. Zindabazar
3. Bondor Bazar
4. Ambarkhana
5. Kajolshah
6. Subid Bazar
7. Tilagor
8. Dakshin Surma
9. Noyasharak
10. A specific distance from hospital
'0' For Back.
Choice Option : 1_
```

Figure-18 : Select Location

CHAPTER 5

TEAM WORK

5.1 Work Distribution

First of all we represent the project idea, then we divide it into different small parts and distribute each small part among the team members based on who is interested in doing a part. Below are some of our project tasks.

DOCTOR'S PORTAL & MEDICAL SERVICES

USER INFO	DOCTOR'S PORTAL	MEDICAL SERVICES
REGISTRATION LOGIN	HOSPITAL LIST MEDICAL FIELD DOCTOR'S INFORMATION TICKETS PRICE TICKET BUYING	MEDICAL TEST TEST PRICE AVAILABLE PLACE AMBULANCE SERVICES

5.2 Individual Contribution

Md. Sajjadur Rahman

As a group leader, I was responsible for managing the whole project. I have divided the project small part among team members. I had work on Part-2(Prices of Medicine) where a list of medicine and medicine prices for each tablet are included. Alongside, collecting, editing and merging was mine weekly responsibility. I also created the registration and login function.

Assembling the whole project, designing and checking the whole the project was mine duty.

Khadiza Akther

She has done Part-1(Doctor's Information & Tickets Buy) where a list of hospital, medical fields and doctor's information for each hospitals medical field, tickets buying are included. Also she checked all functions calculating work. She assisted me to divide project work among team members.

She has also writing, collecting, designing and analyzing the project report.

Md. Abdul Muhyeimin Al Syed

He has done Part-4(Ambulance Services) where ambulance services is divided into two parts .One is Home to Hospital and another is Hospital to Home .Moreover he added a function by which user can know the rate of ambulance from a fixed destination . [Home to Hospital Locations are not outside of Sylhet City]

He has also written chapter-2 (Project planning, relevant study & findings and challenges) of our project report.

Humayra Kabir Nisa

She has done Part-3 (Medical Test , Price & Location) it viewed test price where she showed 10 different main categories of medical test and each sub test price ,And available place (This section is able to show three nearest medical or diagnostic center as well as far) for test .

She has also written chapter-6 (Learning and conclusion and further scope for development) of our project report.

5.3 Miscellaneous

Though the project is information based, at first we ignore calculation Part. In the middle of project we thought it would be friendly if we add calculation part. But, we have not enough idea how to start it, after so many discussion and group call we could find a solution. We did calculation with help of 1D Array.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Learning and Conclusion

Our project was started with the intension to invent some useful feature in the medical sector. From this project we got real experience about team work or group work. We believed, from this project not only we but also our batch mate will benefited (Doctor's information & Ticket Buy, Price of medicine and medicine buy, Medical Test & Test Price, Ambulance Service are included). We can also learn from this project how to make a file. We also learn how to maintain a project file with the cooperation of group members. This project will be very helpful to get an idea about medical sectors and services. Hopefully it will play a significant role for everyone.

6.2 Scope for Further Developments

There are so many scope for further development to our project. Now some important points is given below:

1. We take some familiar hospitals for this project, so in future if we can do informatics big project like this. Such as, we will take whole Sylhet's hospital information, buying ticket, price of medicine, medical test and test price, ambulance service. So that those people who live out of Sylhet (rural area) can get proper service easily.
2. After completing Sylhet Division, we will include whole countries' hospital's information and doctor's information, also medical accessories such as people can get information easily within a few minutes.
3. For further development we can improve our project by adding new features and that is we can booked a cabin for critical patient and what would be the cost for a day.
4. In our registration part, we want to create files where it is naming from user name.

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Link : <https://www.codegrepper.com/code-examples/c/how+to+declare+funciton+in+c>
(Access on : 29 April 2021)