**PROJECT REPORT**

**MEMBERS:** Tanvir Anjum (Team Leader), Tanzil Ebad Chowdhury, Tanjuma Islam, Fahmida Sabur Tasmia, Mahfuz Rahman

**AUTHORS: Tanvir Anjum (Methodology),** Tanzil Ebad Chowdhury (Teamwork)

**The project described in this literature is designed to facilitate the booking of a doctor’s appointment, overcoming problems of long wait hours, inefficiencies, human contact. The system is remarkably simple yet effective with the promise of effortless, user-friendly appointment setups.**

* **PROJECT METHODOLOGY**

***~Main Menu displays five options~***

If the user selects the ***first option***, it shows all the doctors available by reading every line from a text file named "total.txt", excluding the top line (which contains number of bookings already made for each department)

***Option 2*** is to fix an appointment. The first step is to choose the department. And in the second step, the user can select a proper day from Sunday to Thursday. Based on the number of bookings, the appointment time is shown to him on the day he chooses. He can either confirm it or not. If he approves of it, the details of his appointment such as the day, the time, his name and phone number and his selected doctor’s name are all written and stored to file. If not, then he can continue looking for another day till he is satisfied. He can also go back to the main menu at any instance-there is an option for that as well.

If the user selects the ***third option*** and if he has already made the booking, then he will see his name and appointment details on a list of other people that have booked using this system. Code does that by reading from a file every line and printing it out in the console till the end of file is reached.

***Option 4*** is to save and exit. Here the program terminates after storing all the booking numbers permanently in a file so that program can use the correct data in future.

Lastly, ***Option 5*** is there to update doctor, i.e. replace a doctor with a new one. Firstly, the program asks for username and password to allow administrator access only. Then it asks for the id of the doctor to be replaced. Let it be x. We open two files, one already existing and the other: a new file. We copy all contents of the old file by reading from it and write back into the new file. If we encounter x, then we prompt the user to enter the new doctor's name and continue storing till the end of file is reached. If no x is found, then it displays "error: no doctor with that id". Then the old file is deleted and the new file renamed to the name of the old file.

* **PROJECT TEAM WORK**

When a bunch of people come together as a team to work on a common goal is what team work means. Like that, our group **‘Dark Horse’** consist of five team members.

Five people (names listed below) came together to work as team on the common goal of executing the idea of this project, self-titled,

***‘THE DARK HORSE’***

1. Tanvir Anjum (Team Leader)
2. Tanzil Ebad Chowdhury
3. Tanjuma Islam
4. Fahmida Sabur Tasmia
5. Mahfuz Rahman

As our team leader Tanvir Anjum is the far more reliable person, he initially broke the project down into manageable subtasks, and we mutually decided which team member does the different tasks.

Our project is mostly focused on fixing appointment between doctors and patients. So, in our project we had two different section, first section consists the necessary data and details collection that we eventually used in the other section of the project, which is coding.

Most of the data collection was done by Tanjuma Islam, Fahmida Sabur Tasmia and Mahfuz Rahman.

Tanjuma Islam and Fahmida Sabur Tasmia researched the disease names and their symptoms, although the symptoms were later excluded from the project entirely. Tasmia additionally contributed to a function called ‘booking records’.

Mahfuz provided all the doctors’ names corresponding to the diseases and those doctors’ availability.

It is a common understanding that not everyone can write codes properly. Most of our coding work was done by Tanvir. Tanzil and Tasmia contributed to some portions of the code with the proper guidance given by the team leader.

There are several portions in our code such as appointment fixing, booking storing, showing all doctor’s details etc. Tanzil wrote the doctor’s name fixing and changing portion and rest of the coding work done by Tanvir, who also asked other team members to write some other portions of the code but unfortunately they faced problem owing to the current lockdown condition hampering consistent. We managed to discuss about project layout and basically how we could make it successful.

All of our teammates really came together though, and did a fascinating job of making this such a sweet success.

FACED PROBLEMS:

Tanvir -  
1. Initially used vector to store the bookings, however it failed to retain the bookings added after the program terminated. So, I had to learn a new concept called ‘editing txt file’ to solve it.

2. In conversion of number of bookings to appointment time.

Efti -  
1. Faced problem in formatting text for displaying in console in standard form  
2. In searching for a word in txt file  
  
We apologize for not being able to provide the screenshots of the code, because we heard about sending screenshots after the code was completed.