|  |  |  |  |
| --- | --- | --- | --- |
| **CS102** | **Fall 2020/21** | Project Group | 2D |
| Instructor: | **Özcan Öztürk** |
| Assistant: | **Assistant's Name** |

~ AFTER DIAGNOSIS ~

G2D

**Berkay Çalmaz**

**Furkan Çalık**

**Bilgehan Sandıkçı**

**Furkan Güzelant**

**Emre Turhan**

|  |
| --- |
| **Group/Project Selection**  **14 October 2020** |

# Introduction

The communication after the first meeting between doctor and patient can be problematic since according to a research 24% of patients leave the first meetings unsatisfied (Kosher, 1976). This is because for doctors, it can be challenging to pursue a patient's status since they cannot really communicate with the patients afterwards. Similarly, patients can’t easily communicate with their doctors when they need to. Therefore this program **can only be used after the meeting with** doctors by patients. In addition, not all people are able to go to hospital frequently. There are some people that are old, disabled or live far away from the hospital. Therefore, they can’t get the necessary information when they need it. As now, there is a global pandemic that affects us, there is a need for a remote and easy connection between doctor and patient.

Therefore, we propose a program that helps to connect patients and doctors after the first treatment. It will help the doctors to make a schedule for themselves and track the status and treatment of the patient. It will also facilitate the process of taking appointments for both doctors and patients. Most importantly, patients will be able to get necessary information from their doctor and inform them in the emergency situation. Patients who are not able to go to the hospital will be able to reach their doctors thanks to this program.

# Details

## User Types and Capabilities

1. There are 4 types of users: Hospital administrator, doctors, lab technicians and patients.
2. Hospital administrators access the program through the code they are given before installment of the program to the hospital. They are responsible for adding new doctors and lab technicians to the system. They add them by entering the staff’s information such as name and mails. When a new staff is created, the program creates a unique code for the staff. Then, the program will forward the code to their mail automatically.
3. Lab technicians are responsible for adding the test results to the system. These results will be added to the related doctor’s system and also to the patient’s.
4. Doctors create new patients just like admins and they may choose to give patient’s access code by hand or by email. With the help of this system, they can choose who they want to add to the list. They can monitor and organize their current patients.
5. A patient can see available dates to take an appointment, chooses an appropriate date and if the doctor approves, the patient takes the appointment. A patient also can see his prescription, his own medical history. Additionally, a patient can cancel his booking before a certain time. If a patient has more than one doctor they will see their doctors as a list in the My Doctors section when they enter the access code. They will be able to receive information from each of them independently
6. Hospital administrators access the program through the code they are given before installment of the program to the hospital. They are responsible for adding new doctors and lab technicians to the system. They add them by entering the staff’s information such as name and mails. When a new staff is created, the program creates a unique code for the staff. Then, the program will forward the code to their mail automatically.

* 1. **Helpful Features**

1. Elderly users can adjust the program to themselves to increase accessibility such as enlarging the size of the letters etc.
2. A doctor can see his patients, their personal information, their medical history, their appointment dates.
3. The program will have a separate blood part which helps patients find people with their blood in necessity. The patients will volunteer as a blood donor. These donors will be listed in every doctor's system. When the doctors need to find a specific blood type, they will choose the intended blood from the list and the program will automatically email every patient with the given blood type.
4. A patient can communicate with and ask questions to his doctor in the program and the doctor can give answers to the patient. Additionally, a patient can tell his current problem such as a headache to his doctor in another chatting category such symptoms and the doctor can give feedback as soon as possible.
5. There is a reminder for the patient which sends notifications through the app when he should take his medications and before the appointment dates.
6. A doctor can sort the patients according to their names, appointment dates, age… As well as a patient can sort his doctors according to their names, appointment dates.
7. The program will use an encryption system to secure the information of users and keep them safe.

**2.3 References**

1. Fremon, B., Negrete, V. F., Davis, M., & Korsch, B. M. (1971). Gaps in Doctor-Patient Communication: Doctor-Patient Interaction Analysis. *Pediatric Research*, *5*(7), 298–311. <https://doi.org/10.1203/00006450-197107000-00003>

# Summary & Conclusions

In conclusion, because of the current conditions related to the pandemic, there is a need to communicate remotely between doctors and patients after the first diagnosis. This app hopefully facilitates this communication with related features. Furthermore, this app is suitable to use at hospitals and clinics.