

# SE 216 – SOFTWARE PROJECT MANAGEMENT

## Spring 2023-2024

### Project Proposal

#### MediShare

##### Problem Definition

Some of the biggest problems today are misuse of medicines, waste of paper and uninformed prescribing. Most medicines are chemicals, and some people may be allergic to one of these chemicals, or the reaction of two different chemicals can cause dangerous health problems. People know they are allergic but may forget which active ingredients they are allergic to, but allergies are recorded in health systems. If the answer to the question a doctor asks a patient when prescribing medication is wrong, the medication the patient takes can be harmful and lead to worse consequences. To prevent this, the contents of the prescribed medicines, the medicines and substances that should not be used together, and the system organized according to the patient's allergic status, will give an error and eliminate this problem. Labels on medicines used in pharmacies are a waste of paper. Through the application to be used, people will be able to see how much of the medicine they need on their phone, computer or tablet, they will receive notifications from the application at the time of taking the medicine and they will be able to receive this information as a text message. In this way, they will be able to access information even without an internet connection. In addition, medicines prescribed in a hospital cannot be bought in a pharmacy in another town. For example, a prescription written in Istanbul can be used by someone in Antalya. Thanks to this application, prescriptions will fall into the system and with the instant QR code to be scanned from the phone, both the security problem and possible misuse in the access area will be eliminated.

##### Background Information

The E-Nabız application used in our country is an innovation that has emerged from the merger of the healthcare and software worlds. This innovation has brought some shortcomings. The E-Sağlık has been in use since 2005. It contains our personal information, health information and all our information under the name of health, but although the system contains health information, it does not give any error or information even if the medicine that will cause an allergic reaction is prescribed during the prescription, which causes many situations such as vomiting and progression of the disease on behalf of the patient. In Turkey, a large number of medicine boxes are sold, for example 2.4 billion medicine boxes in 2020, 2.4 billion labels were printed accordingly and there was a waste of paper, and a significant portion of these medicines consist of drugs prescribed by doctors for profit. As the world's population grows and the need for green spaces increases, our application will be able to track both the wrong medication given to the patient and the location of the printed labels through the pages in the application. The drugs entered by the doctors from the panel will be monitored and if they exceed a certain quota, the system will send a notification to make an audit. Finally, after the adoption of e-prescription in Turkey, the drugs prescribed in different cities can be taken by people who are not sick and this cannot be tracked. Our application will be able to provide their medicines with the QR code that is instantly generated by the pharmacist and the QR code that is instantly received on the phone, and in this way the use of drugs by people who should not be using drugs will be prevented.

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#### Objectives

- Keeping a record of the prescribed medication and recording it quickly in the system.
- Only authorized people can access the system, prescribe and monitor medication.
- Information on the frequency of use and side effects of medicines recorded in the system.
- Keeping the health record up-to-date by establishing a connection with electronic health systems.
- To prevent paper waste by reducing the labels used on medicines.

#### Approval Signatures and GitHub Accounts

GITHUB: SE-216-Section1Group4

[https://github.com/  
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