



Medical prescription generator using python

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MEDICAL PRESCRIPTION GENERATOR USING PYTHON

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ABSTRACT: In this project, Application first it will ask for patient name and then ask for patient age and gender and also doctor's response and suggestion and medicine name and which time patient have to take medicine and then it will generate receipt and you have to fill email address into it so application can send mail to patient. This application is totally based on voice and GUI. It developed with Tkinter and python. Advantages of this application is this patients didn't have to wait in queue and also in this covid 19 situation social distancing is major thing to avoid infect from virus so having this application is advantage and also this application didn't record or save any data so there is no worry about personal information .

KEYWORDS: GUI, Tkinter and python, covid 19, Social distancing

INTRODUCTION:

A Prescription often abbreviated Px or RX, is a health care program implemented by a physician in the form of instructions that govern the plan of care for an individual patient in the 16th century. The word 'Prescription' i.e from 'pre'-(before) and 'script' (written) refers to the fact that the prescription is an order that must be written

down before a compound drug can be prepared.

A major issue in India is that generally prescriptions are still written by hand and the readability of such handwritten prescription is very limited. Several cases have come to light, where an error in understanding the prescription by chemist has led to the wrong medication, which caused severe health issues to

the patient. A major issue in India is that generally prescriptions are still written by hand and the readability of such handwritten prescription is very limited. Several cases have come to light, where an error in understanding the prescription by chemist has lead to the wrong medication, which caused severe health issues to the patient. Another challenge is giving access to patient data to the doctors in the hospital without any manual input to reduce Doctor-EHR time. To achieve this, a QR code is generated on the mobile app for Patients, linked with the Unique Identity of Patient can be utilized for automatic patient record retrieval on the visit.

EXISTING SYSTEM :

The idea of electronic prescription is nothing new, there are a few systems in the Indian market that offers a way to digitize the generation and storage of prescriptions. Some of them are described below. IRX Clinics is a complete clinic management suite developed by Trata E Systems. It includes a

smartpen, a smart prescription pad, and a tablet. The system allows doctors to continue writing prescriptions by hand and automatically capture the data in the background. The smartpen and prescription pad work in collaboration to save the data digitally. The tablet is preloaded with the clinic management suite which can be used to manage prescriptions, appointments, diagnoses. Prescrip is an app that maintains patient records and lets doctors print the prescription in seconds. The app allows doctors to create prescription with ease, they just have to input the diagnosis. The app will automatically generate the prescription, and it gets better with use. It predicts the medicines on the basis of diagnosis by the doctor. E-Prescription by i-Grandee Software Technologies Pvt. Ltd. is a client-server system with capabilities to share E-Prescription with pharmacies. Doctors create a prescription and transfer it to the pharmacy. A fully paperless prescription

system which allows access to the electronic prescription by all the authorized healthcare providers.

Prescription pad is one of the widely used prescriptions writing medical software. It provides Safe, first-rate, foolproof prescription writing facility, comparative analysis of patient's medical history.

SlashDr is a virtual physician assistant. It generates the Medical Council of India Compliant prescription, doctors have to select the symptoms diagnosed and the system will automatically generate the prescription.

Gboard is the google keyboard mobile application which has voice input method that can be utilized to fill any field in a form using speech to text.

Most of the above prescription systems take manual input from the doctor and then generate a prescription. Some of them updated by medical staff. In rush hours, Each medical staff

predict medicines on the basis of symptoms.

PROPOSED SYSTEM:

In the current health system, when patients arrive at the hospital, the first step is to identify the patient before proceeding ahead. Patient identification is performed by mobile number or medical card or by identity/name. Medical staff verifies the provided information and book consultation for the patient. After that, the patient may be seen by the doctor. In each step, Patient identification and record retrieval are repeated which is a time-consuming process. As a paper-based prescription is used at most of the places, The review of record and updating of EHR is again time-consuming and doesn't benefit doctors in the current scenario. The hospitals where EHR is managed and used for patient records are

has to update several patient re using the patient identifier,

which may lead to the wrong updation in the patient record. That can cause serious consequences. A solution to these issues is described in this section. In this Medical Prescription Generator, it is an online medical advisory service to provide initial medical advice to patients by using python. So, first it will ask for patient name, age, gender. It will generate doctor's response and suggestion and also medicine

name. And also includes which time patient have to take medicine and then it will generate receipt and we have to fill email address into it so application can send mail to patient. The Clients can share their problems through speech recognition. In addition to this, this application didn't record or save any data so there is no worry about personal information.

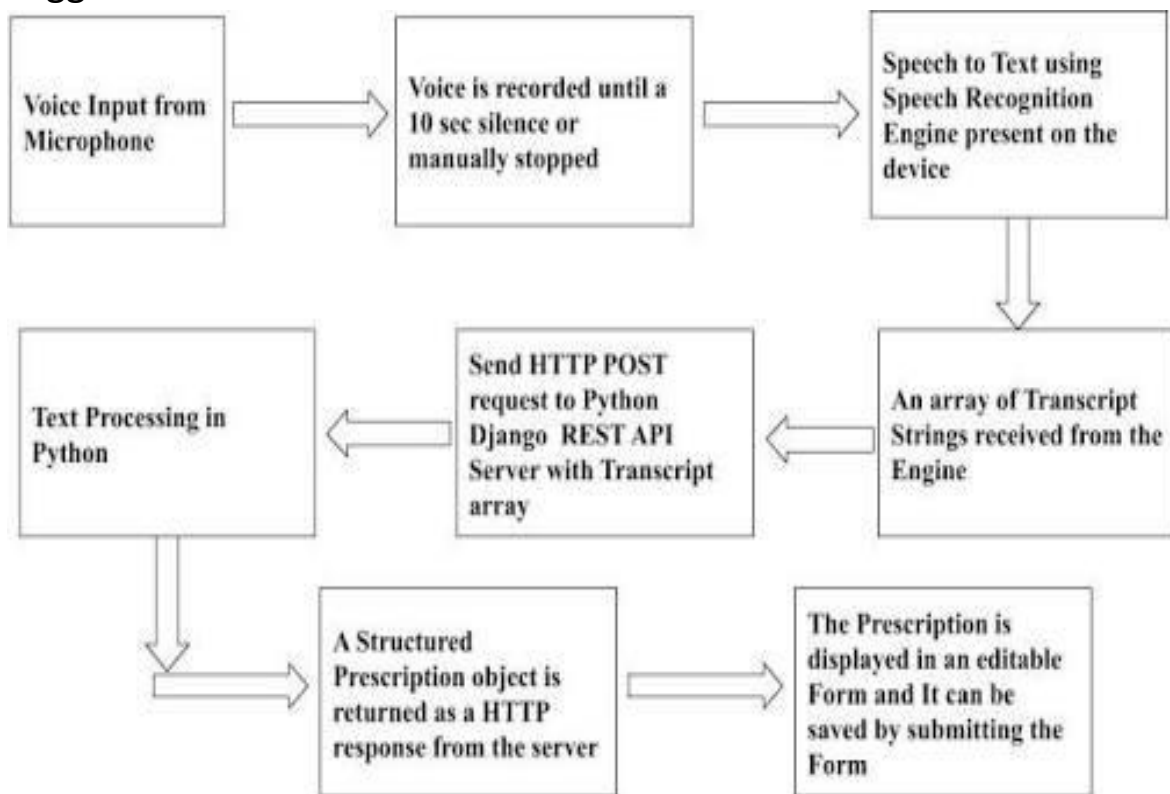


Fig: Voice prescription frontend process

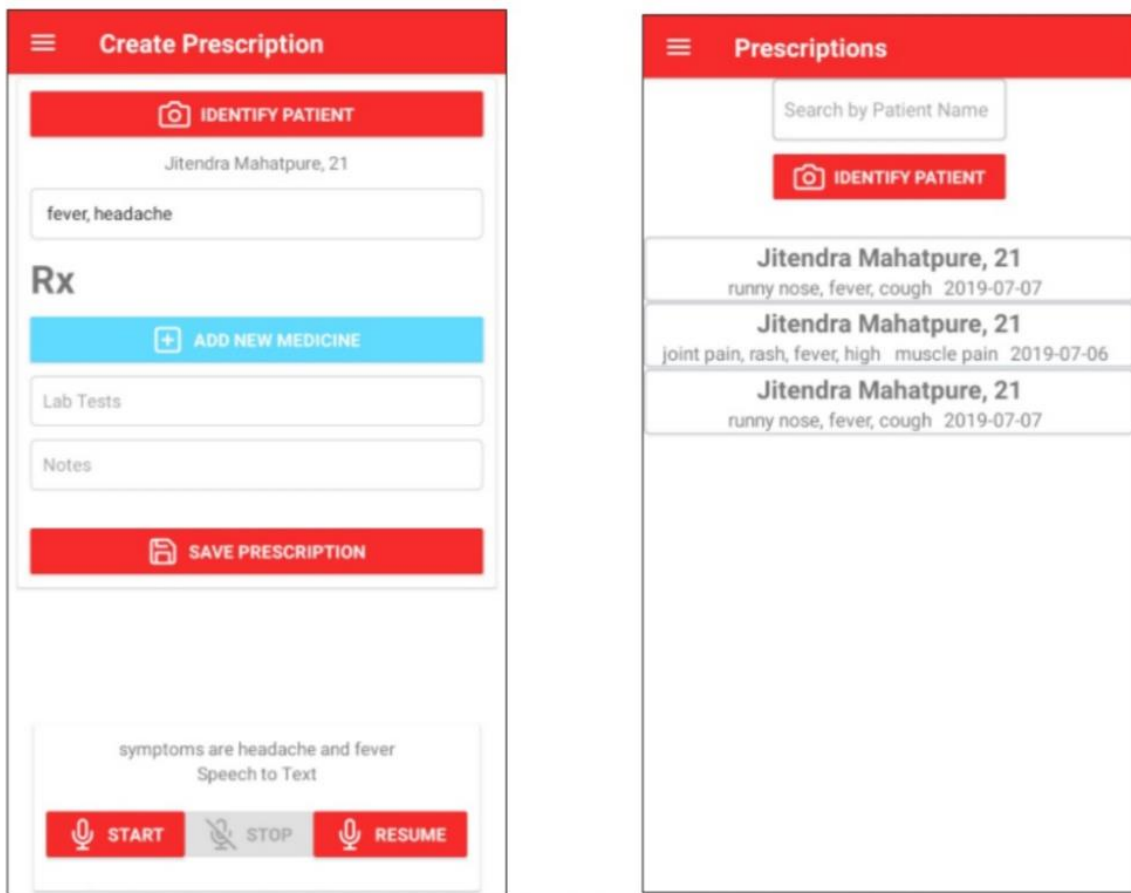


Fig: Doctor Mobile App:E-prescription generation page and listing of Prescriptions.

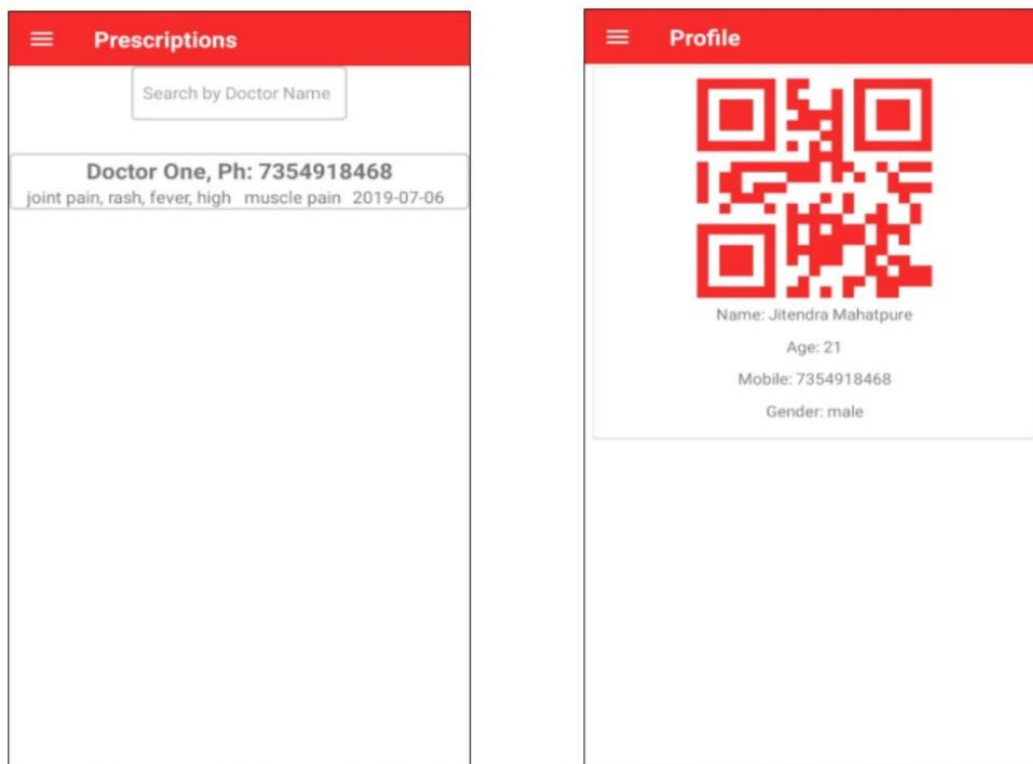


Fig: Patient Mobile App: Prescription List and profile

CONCLUSION:

The proposed and implemented system aims to reduce the amount of time consumed in creating and accessing patient records. It also provides the features of an EHR in a Mobile Application. Thus, making this system available to all the doctors of India through their smartphone.

Authors implemented an innovative solution to solve the problem of illegible handwritten prescriptions. Voice-based e-prescription needs a minimal

change in the workflow of doctor but in the long run, it will create a huge impact in developing a digital ecosystem for patients. E-prescription system helps in managing EHR in real-time while maintaining the patient's privacy.

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