Medical Resource Station

CSE687 Assignment 1

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8. Introduction

Nowadays, the United States national health expenditures have reached $3.8 trillion per year. For each citizen, the cost would be around $11600, which is a huge expense for everyone. The health expenditures grow up fast every year, but people in the United States didn’t obtain the corresponding medical service they deserve. For such expensive health expenditures, it is quite important for people to choose the suitable insurance and Primary Care Provider. For people who want to get a medical service, this system allows them to know the most convenient and fastest medical services around them, and at the same time, people can learn more about these medical services, not just a title and a name. For doctors who use our system, the system allows them to show their advantages and to be able to know the basic information of their patients (public part).

1. The App Idea

The central idea of our project is to help people find a suitable Primary Care Provider they would like to have. The sorting principle would be according to Primary Care Provider’s working experience, distance from the user’s location to the clinic, the price and amount of registration, etc. If someone doesn’t have an insurance plan, our app would recommend some insurance first. This app would also have other features which would make the medical process more convenient. People can browse doctors' timetable on the system and book medical services over a period of up to half a year. For doctors, the system allows them to send notifications to patients online, and to record the relevant treatments they have performed on patients.

1. Why Is This A Killer Idea

Medical treatment is always a big problem for everyone. Everybody wants the best treatment service at the lowest price, but it would take much effort. Normally, people who want to choose a Primary Care Provider have to spend much time on finding a capable Primary Care Provider on the insurance website and review almost every doctor on it. For those who need to find medical services, they can directly find the most suitable medical service on the system without wasting a lot of energy, and at the same time, they can intuitively compare medical services on the website. For doctors, they can easily and quickly read patients' medical reports, physical examination reports, and details of allergic drugs in the system. If doctors have to go out unexpectedly and cancel some appointments, they can quickly do it on the system and give patients a phone call automatically.

1. Target Audience

It is very important for people to choose the suitable insurance and Primary Care Provider. This app targets to people who want a convenient medical method. Sometimes people moved to a new country or a new city, they need suitable insurance and Primary Care providers, but they know nothing about the medical service provider around and they don’t have reliable friends to get recommendations.

This app is also targeted to doctors who want a better experience in organizing their patients and data. For doctors who just start their own clinics, the system will make them easier to become one of the local communities. People can quickly know the information about doctors on the system and start cooperation.

1. Problems Being Solved

Here the main problem solved is faced by many people that they cannot find proper Primary Care Providers who have enough working experience and high rates but not far away from users. Users could save much time on this and have a convenient way in the medical process. It is much easier for doctors to organize their data and patients.

1. Feasibility

The application which we are going to design is financially and technically feasible. We would apply recommender algorithms to sort doctors. We would use the Google Maps API to find the distance and directions between users and doctors. Uber or Left API would also be applied to help reserve cabs going to clinics or hospitals. PayPal API could help users make payments for consulting online. A database would be created to store doctors’ information such as their rates and working arrangement. Doctors can upload their patients’ reports, bills even prescriptions. So patients could have easy access to them. Patients can cancel the appointment two hours before the appointment, and doctors can also inform people to cancel the appointment before the appointment date.

1. Project Scope

This project will consist of creating a web application platform that can be used to find a companion for various events. The functionality will be tested and completed by May 2020. The logic for the given project is given below:

**App Logic:**

1. Users and Doctors Profile

a. Username

b. Password

c. Email

d. Phone Number

e. Location

f. Questions about Personal Health(user)

g. Advantages(doctor)

2. Users create a profile on the platform.

3. Users can write their personal information, location, family genetic disease history, etc.

4. Users can register future insurance on the system or view recommended

insurance.

5. Users can make appointments on the system.

6. Doctors can upload the user’s information and report, the user would have

access to it.

**Main Functions :**

Physician recommendation

Make an appointment

Cancel appointment

Appointment reminder

Queue reminder(Users can know how many patients are waiting in front of them, as well as the estimated waiting time)

Online inquiry(User can chat with their doctors online)

Report form enquiry

Prescription query

Bill query

Personal medical records

Doctors comments

Insurance recommendation

Keyword search

Diseases encyclopedia

Banner

Navigate to the hospital

A medical appointment

My account(Including login, logout, change password, forget password and other basic functions)