

Software Project Lab - II

Online Doctor

An online consultation website

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Introduction

Many deadly diseases are preventable and can be cured if treated at an early stage. However, people tend to ignore the early symptoms of a disease as they are mild. And till the time they become aware of the disease, the infection has already spread into their body. Hence, it is always advisable to have a regular body check-up to avoid health issues later. But due to the day-to-day busy schedule, many times it is not possible for the patients to go and get a medical appointment booked in person. Which leads to a delay in the treatment and may cause a major health problem later. The Online Doctor Application proposed here is a web application that will help the users to identify a disease based on the symptoms. When a patient enters his /her symptoms the system will incorporate **Machine Learning Techniques** to identify the disease. Then based on the disease identified the system will show a list of doctors having expertise on that particular disease. The patients can book an appointment with the doctors as per their preferred time & date. The patients can also discuss in a forum with a doctor to get consultations.

Scope of the Project

Project Goal:

The goal of this project is to bridge the gap between a patient and a doctor through a simple web app and predict the disease via syndrome by ML.

In this system, the admin can manage or view the details of doctors, patients, diseases and can also receive feedback from the patients. It also manages all the information of the doctor's schedule, doctor fees, and appointments for the doctor. The doctor can chat with the patients directly through a forum to keep track and be up to date about their health status. The patients can guess the disease by entering the symptoms they are suffering from and can also keep up-to-date knowledge about that. If the user/patient feels like they need a direct appointment with a doctor, they can book an appointment through the website.

Features:

The system comprises of 3 major modules with their sub-modules as follows:

Admin:

1. Login

- Admin can login in his personal account using id and password.

2. Manage Doctor

- Add new Doctors
- View doctors and patients list.
- Delete doctors

3. Manage Disease

- Add new disease
- View disease or its symptoms
- Edit details for the disease
- Add/Update disease category

4. View Feedback

- View feedback given by the patients

Patient:

1. Register

- Users can register using personal details.

2. Login

- User/Patient can login in his personal account using id and password.

3. Profile

- View & update profile
- Check for current, pending, previous or other appointments
- Book an appointment

4. Search Disease

- Search diseases by symptoms.
- view all available doctors for the corresponding diseases

5. Forum Discussion

- Discuss about their problems with doctors

6. Book Appointment

- Select doctor for the appointment
- Date of appointment
- Time of the appointment
- Charges for the appointment

Doctor:

1. Register & Login

- Doctor can register using personal details and can login in his personal account using id and password

2. Profile

- View & update profile
- Check for current, pending, previous or other appointments
- Accept user/patient appointments if available

3. Forum Discussion

- Select user/patient from the list and discuss in a forum with his patients about their problems
- View profile of the patients

Limitation

- Wrong inputs will affect the project outputs
- Admin need to add diseases to the app manually
- User need to wait until doctor accept the appointment
- Internet Connection is mandatory

Motivation

People of rural areas are severely affected by the lack of quality healthcare and qualified doctors. This is the same case for the urban poor people. To grant them easy yet cheap access to a better healthcare system is the primary driving force behind this project. They can get a somewhat accurate diagnostic of their health status just by sitting at home. They can also book an appointment before even leaving the home for the hospital so that they're ensured a time slot with a doctor of a particular hospital.

To sum it up, our website solves a problem that's widely seen in countries like Bangladesh and gives a go to solution.

Work Plan

We plan to continue our project following the given order:

- Project Proposal Preparation
- SRS Report Documentation
- Development
 1. Build the Front end
 2. Build Database
 3. Build Back end
 4. Testing & Debugging
- Deployment of the Final Project
- Final Report Writing

Technologies to be used:

- Frontend : HTML, CSS, JavaScript + ReactJs/AngularJs
- Backend : DotNet/node.js/Django
- Database : MySql/MongoDB

Timeline:

Activity	Tentative timeline
Project Proposal Preparation	1st-3rd week (Starting from Dec 1, 2022)
Prepare SRS documentation	4th-8th week
Developing the project	8th-19th week
Deployment	19th-20th week
Report Submission	20th-21st week (Final defense on May 1, 2023)

Supervisor's Approval

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Date:

20/12/2022

Supervisor's Signature:

