Project Proposal

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1 Project Description

The **DocAssist** Portal is a web-based platform aimed at improving healthcare services by facilitating the management of medicines and generating prescriptions & medical bills. This platform will consist of these core components:

1. **Medicine Database**: A centralized database containing information about various medicines from different brands, including their names, composition and prices. Users will be able to search for medicines and view their details.

2. **Medicine price analysis**: Users can analyze the prices of medicines across different brands using plots.

3. **e-Prescription Generator**: A tool that allows doctors to create e-prescriptions for their patients. Doctors can select medicines from the database, specify dosages, add instructions and generate a pdf of prescription.

4. **Bill Generator**: A feature that generates bills for patients based on the prescribed medicines and their prices. Patients will receive an itemized bill, and healthcare providers can easily manage billing records.

2 Scope of Work

1. **Medicine Database**

   - Scrap the medicine data from other websites and populate the database.

   - Develop a webpage for Admin user

     - to add medicines using forms OR

     - import them by uploading csv file.

   - Develop a webpage for anyone

     - to search and browse medicines fetched from database using PostgreSQL queries.

     - to display the fetched medicines in a tabular view

     - to display analysis of prices across different brands and compositions using pyplot.

2. **e-Prescription Generator**

   Develop a web page for doctors to

   - sign up/log in and create e-prescriptions.

   - search for medicines from the database and add them to the prescription.

   - specify dosages, instructions, and patient name in the prescription and make it downloadable as a pdf file.

3. **Bill Generator**

   - Create a billing module that generates itemized bills based on e-prescriptions.

   - Include details such as prescribed medicines, quantities, prices.

   - Allow healthcare providers to view and download their bills from their accounts.

3   Technology Stack

- HTML, CSS, Javascript

- PostgreSQL

- Python3

- PyPlot-based frameworks

- Git