Patient Health Data Management and Analysis Tool-

ABSTRACT

This project is a web-based Patient Log and Health Analyser system developed using HTML and Python (Brython). The system stores patient records and automatically analyses health parameters such as BMI, blood pressure, and blood sugar levels. Based on the results, it provides health advice and recommends doctors. Patient data is stored locally using browser storage. The project reduces manual work and helps in quick health assessment.

1.INTRODUCTION

PROBLEM STATEMENT- "A simple tool to provide digital assistance to patients and to healthcare staff in recording, understanding and managing patient information."

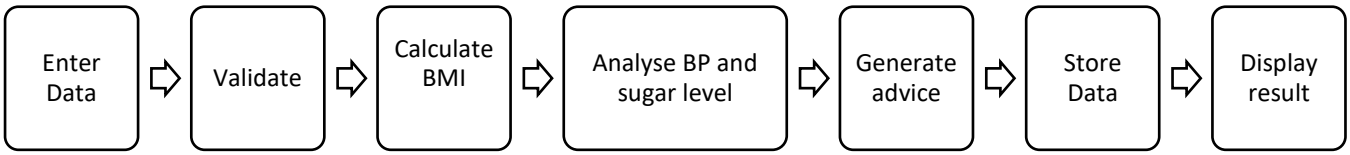
This program includes a BMI calculator, bp analyser, blood sugar value analyser, etc as well as general, research based diet and exercise tips that is modified according to the patient values.

Maintaining patient records and analysing health parameters manually is time-consuming. This project provides a digital solution to store patient data and analyse health conditions quickly using simple rules and formulas.

2. METHODOLOGY

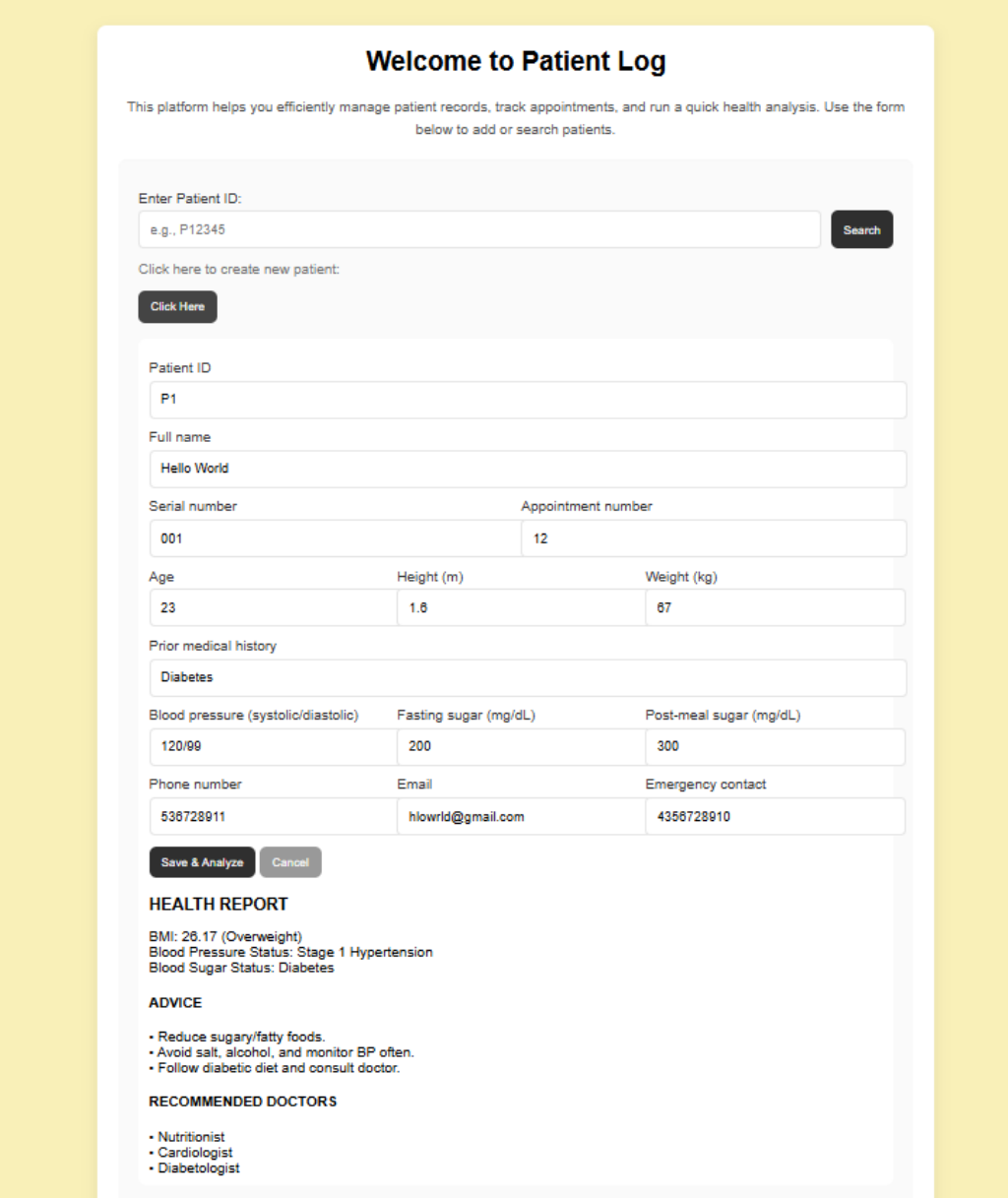
Patient details are entered through a form. Data is validated and health parameters are calculated. Results are analysed and displayed along with advice and doctor suggestions. Data is saved in browser local storage. Standard Python libraries such as **json** are used to store and retrieve patient data from the browser's local storage, while the **re** library is used for basic input validation like checking email format. The **browser** module is used to access form inputs, display results, and show alerts. The project uses Brython, which allows Python code to run directly inside the web browser.

Flow-



3. RESULTS

The system successfully stores patient data, calculates BMI, analyses blood pressure and sugar levels, and displays health advice and doctor recommendations accurately.



4. CONCLUSION

The project successfully demonstrates a simple patient management and health analysis system. It reduces manual calculation errors and provides quick health insights using Python in the browser.