**Title:** Health Diagnosis System: An Integrated Approach for Symptom Analysis, Diagnosis, and Treatment Planning.

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# **Objective:**

The objective of this program is to develop a user-friendly health diagnosis system to analyse the symptoms and provide users with accurate medical diagnosis. The system aims to incorporate advanced algorithms and offer an accurate and personalised treatment plan.

#### Method:

### 1) Symptom input interface:

Design and implement a user interface that allows an individual to input their symptoms in a clear and user-friendly manner.

## 2) Symptom analysis:

Develop and integrate an advanced level algorithmic model capable of analysing input symptoms. Incorporate machine learning techniques for enhancement of accuracy.

#### 3) Medical knowledge database:

Build a database of medical knowledge that contains a wide range of illness, symptoms, medications and treatment plans. Ensure that the database is regularly updated to avoid any inconvenience.

#### 4) Diagnosis engine:

Implement a diagnosis engine that uses the medical knowledge database and symptom analysis to generate accurate diagnosis.

#### 5) Medication recommendation:

Integrate a module for recommending medications according to the diagnosis, considering factors such as allergies, and individual health profiles.

#### 6) Treatment planning:

Develop a treatment planning system that gives a scheduled planning for the course of medication suggested.

### **Results:**

- The program successfully implemented symptom input interface, allowing users to easily enter their symptoms.
- The symptom analysis demonstrated high accuracy, providing reliable diagnoses.
- The medical knowledge database proved to be comprehensive, contributing to the precision of the diagnosis engine.
- Medication recommendations were generated with consideration for safety and individual health factors.
- The treatment planning component offered users a detailed and personalized roadmap for managing their health concerns.

#### **Conclusion:**

The developed health diagnosis program showcases the feasibility and effectiveness of technology into the healthcare domain. The combination of advanced algorithms, a comprehensive medical knowledge database, and personalized recommendations positions the system as a valuable resource for individuals seeking quick and reliable health insights. Future iterations will focus on continuous improvements, expanding the knowledge base, and incorporating user feedback to enhance overall accuracy. This research contributes to the ongoing efforts to leverage technology for accessible and informed healthcare solutions.