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ABSTRACT

The **AI-Based Healthcare Advisor & Tracker** is a web-based platform designed to assist users in monitoring their health, analysing symptoms, and receiving AI-driven medical insights. The system uses React.js for an intuitive user interface, Django for backend data processing, and TensorFlow/PyTorch for machine learning-based disease prediction and real-time health tracking.

The platform features an AI chatbot for health consultations, a symptom checker, integration with wearable devices (Google Fit/Apple HealthKit), and a medical record management system. Users can track vitals such as heart rate, blood pressure, and sleep patterns, set health goals, receive personalized fitness & nutrition plans, and book doctor appointments.

Secure authentication is handled using Firebase Auth and health data is stored in PostgreSQL.

By combining AI with real-time tracking, this system enhances preventive healthcare, promotes self-monitoring, and improves medical decision-making, making it a valuable tool for modern digital health management.

Users interact with the platform for **health monitoring, medical insights, and AI-powered assistance**. The system provides various features to help users track their well-being.

***User Actions & Features***

**1.Symptom Analysis and Diagnosis**

Ask about symptoms (e.g., fever, cough, headache)

AI suggests possible conditions based on symptom patterns  
 Categorizes urgency (e.g., mild, moderate, severe)  
 Recommends home remedies or professional consultation

**2.Personalized Diet and Nutrition Advice**

AI-generated meal plans based on health goals (weight loss, muscle gain, diabetes, etc.)  
Nutritional breakdown of meals (calories, proteins, vitamins)

Diet restrictions based on allergies and medical conditions

**3. Fitness & Workout Plans**

Exercise recommendations based on BMI & fitness goals  
 Customized workout routines (yoga, strength training, cardio)  
Daily activity tracking (if integrated with wearables)