

Personal Health Advisor

-Your Health, Your Way



Problem Statement:

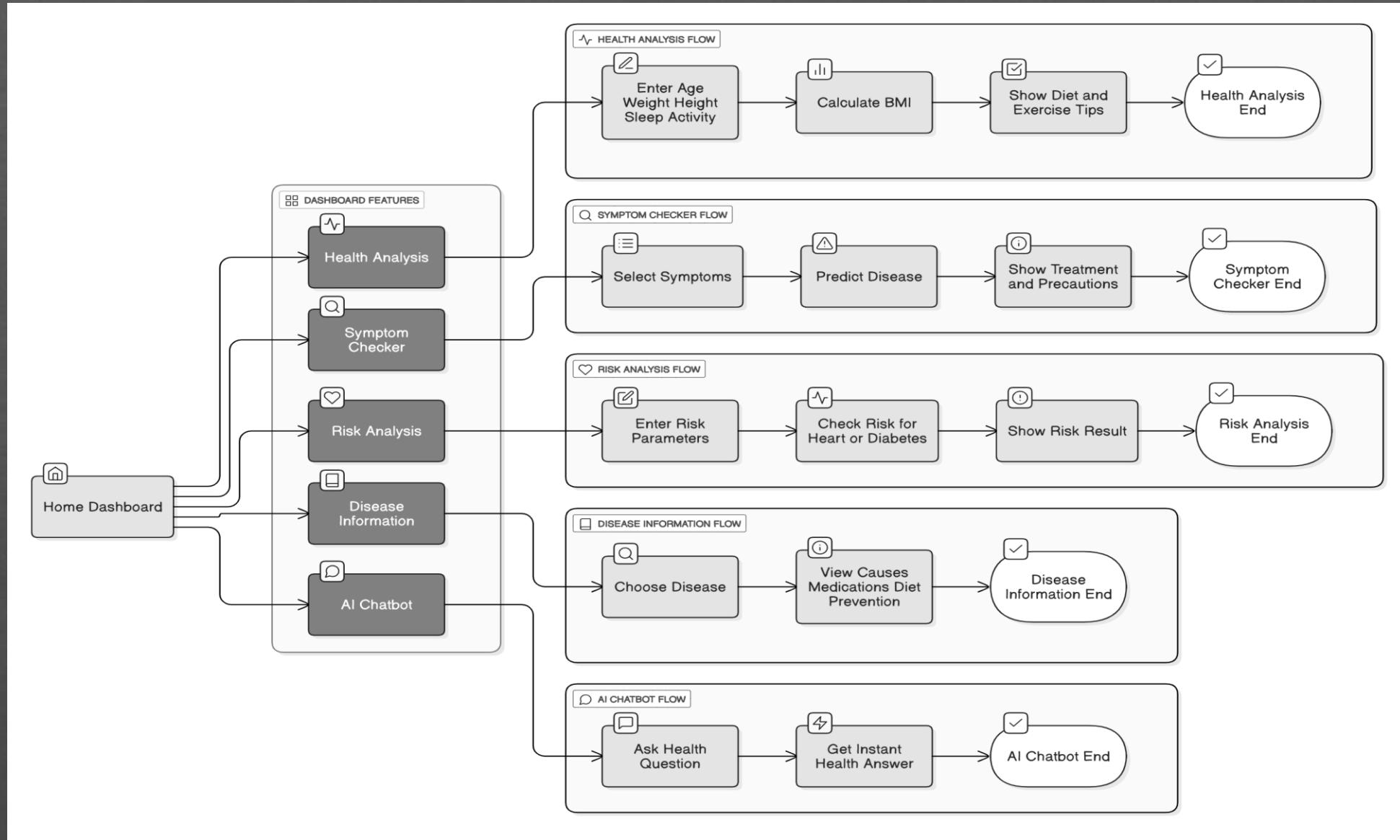
Accessing personalized health analysis and lifestyle recommendations based on one's medical input information remains a challenge. Many individuals struggle to understand their symptoms, assess basic health risks, and find trustworthy information about diseases. The absence of a centralized, intelligent, and user-friendly platform often leads to confusion, misinformation, and delayed action.

What if an AI-powered virtual health assistant could help users analyze their symptoms, assess lifestyle-related health risks, explore detailed disease information, receive personalized health analysis—including BMI, diet, and exercise tips—and get instant answers to health-related questions?

Our Solution:

- Provides tailored insights on BMI, diet, and exercise based on user input.
- Predicts possible diseases from selected symptoms with confidence levels.
- Calculates the risk of heart disease and diabetes using health parameters.
- Offers clear information on diseases, medications, diet, and precautions.
- Answers general health questions in real-time through a smart chatbot.

User Flow:



Features

Personalised Health Advisor

- Dashboard
- Health Analysis
- Symptom Checker
- Disease Information
- Risk Analysis
- AI Chatbot
- About Us

Disclaimer: This tool is for educational purposes only and does not constitute medical advice. Always consult a qualified healthcare professional for diagnosis and treatment.

Welcome to Your Personal Health Advisor

The Personalized Health Advice App is a virtual assistant that provides tailored health recommendations using user inputs and a trained machine learning model. It helps users assess health risks and receive lifestyle and medical suggestions based on their profile.

Quick Access Features

Health Analysis
Provides a personalized health analysis based on your profile. Enter your details to receive tailored insights on your BMI, exercise, diet, and health risk assessment.

Symptom Checker
Select your symptoms and get instant disease predictions with detailed information about treatments, medications, and precautions for better health management.

Disease Information
Browse comprehensive information about diseases, including detailed descriptions, medications, dietary recommendations, and important precautions to follow.

Risk Analysis
Assess your risk for heart disease and diabetes using advanced calculators. Enter your health parameters and view comprehensive results in the respective tabs.

01

PERSONALIZED HEALTH ANALYSIS:

Provides tailored insights on BMI, diet, and exercise based on user input.

Health Analysis

Provides a personalized health analysis based on your profile. Enter your details to receive tailored insights on your BMI, exercise, diet, and health risk.

Personal & Health Information

Age: 21	Gender: Female	Height (cm): 168	Weight (kg): 75
Activity Level: Sedentary	Fitness Goal: Weight Loss	Dietary Preference: Omnivore	Disease/Health Condition: Obesity, Asthma
Stress Level (1-10): 6	Hours of Sleep: 5	Daily Steps: 4000	Hydration Level (L): 2.40
Resting Heart Rate: 76	Blood Pressure Systolic: 120	Blood Pressure Diastolic: 80	

Analyze My Health Profile

Your Health Profile Overview

BMI: 26.6 (Overweight)	AGE: 21 years	WEIGHT: 75 kg	HEIGHT: 168 cm
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BMI Analysis

BMI Status: Overweight
You are overweight. Consider implementing a balanced diet and regular exercise routine to achieve a healthier weight.

Sleep Analysis

Sleep Status: 5 hours
⚠ Insufficient sleep detected. Aim for 7-9 hours nightly for optimal health, immune function, and mental clarity.

BMI Visualization

Body Mass Index (BMI)
26.57 (4.57)

Detailed Health Recommendations

Top 3 Meal Recommendation

Meal Recommendation 1 (Breakfast)

- BREAKFAST**: Pancakes with fruit and syrup

Nutritional Profile: Calories: 1940 kcal | Protein: 80g | Carbs: 277g | Fat: 60g | Fiber: 32.4g | Sugar: 120.0g | Sodium: 16.0mg

Meal Recommendation 2 (Lunch)

- LUNCH**: Grilled chicken sandwich with whole-wheat bread

Nutritional Profile: Calories: 1770 kcal | Protein: 80g | Carbs: 250g | Fat: 50g | Fiber: 30.0g | Sugar: 125.0g | Sodium: 16.0mg

Meal Recommendation 3 (Dinner)

- DINNER**: Chicken stir-fry with brown rice

Nutritional Profile: Calories: 1770 kcal | Protein: 80g | Carbs: 250g | Fat: 50g | Fiber: 30.0g | Sugar: 125.0g | Sodium: 16.0mg

Tailored Exercise Program

Cycling: 40 min, 300 kcal, 110 bpm, Effectiveness: 10.0/10
Running: 30 min, 400 kcal, 130 bpm, Effectiveness: 10.0/10
Strength Training: 40 min, 270 kcal, 108 bpm, Effectiveness: 10.0/10
Swimming: 45 min, 350 kcal, 120 bpm, Effectiveness: 10.0/10
Walking: 30 min, 200 kcal, 100 bpm, Effectiveness: 10.0/10

Detailed Health Recommendations

Health Risk Level: Low (Score: 2.68)

Recommendations:

- Continue maintaining your healthy lifestyle
- Regular check-ups are still important
- Consider preventive health measures

Additional Health Insights

Goal Achievement Tips

- Set realistic, measurable goals
- Track your progress regularly
- Stay consistent with healthy habits
- Celebrate small victories

Health Monitoring

- Regular check-ups with healthcare providers
- Monitor vital signs at home
- Keep a health journal
- Use fitness tracking apps

02

SYMPTOM CHECKER:

Predicts possible diseases from selected symptoms with confidence levels.

The image displays the Symptom Checker application interface, which consists of several interconnected panels:

- Symptom Selection Panel:** Shows a search bar and a category browser. The "Pain & Discomfort" category is selected, displaying symptoms like Stiff Neck, Painful Walking, Back Pain, etc. A tooltip for "Stiff Neck" is shown: "A stiff neck is a limited range of motion and discomfort when moving the head, often due to muscle strain."
- Selected Symptoms Panel:** Shows the user has selected "Indigestion" and "Stiff Neck". It includes a button to "Analyze My Symptoms".
- Predicted Condition Panel:** Shows "Migraine" as the predicted condition with a confidence score of 100.0%.
- Migraine Detail Panel:** Provides detailed information about Migraine, including its description ("Migraine is a type of headache that often involves severe pain and sensitivity to light and sound."), treatment options, diet guidelines, and precautions.
- Recommended Medications Panel:** Lists medications for Migraine, including Analgesics, Triptans, Ergotamine derivatives, Preventive medications, and Biofeedback.
- Recommended Specialist Panel:** Recommends a Neurologist for consultation.
- Consultation Tips Panel:** Offers tips for preparing for a consultation, such as writing down symptoms, bringing medical records, and scheduling follow-up appointments.

03

RISK ANALYSIS:

Calculates the risk of heart disease and diabetes using health parameters.

Heart Health

Risk Analysis

Assess your risk for heart disease and diabetes using the calculators below. Enter your health parameters and view your results in the respective tabs.

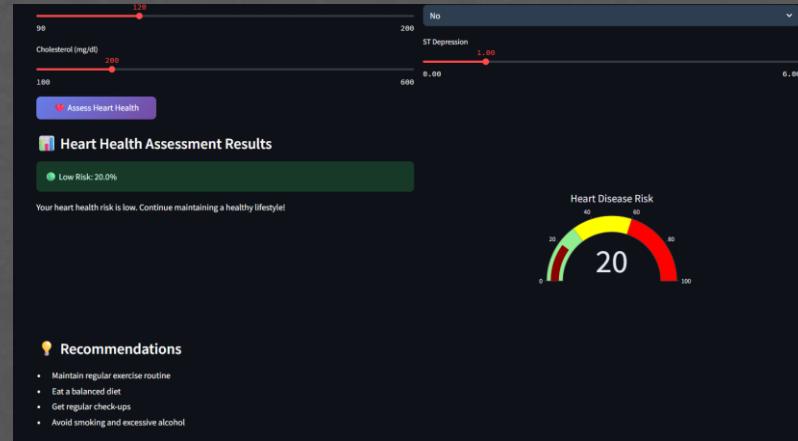
Heart Health

Age: 58
Sex: Male
Chest Pain Type: Typical angina
Resting Blood Pressure (mm Hg): 120
Cholesterol (mg/dl): 200

Fasting Blood Sugar > 120 mg/dl: No
Resting ECG Results: Normal
Maximum Heart Rate: 150
Exercise Induced Angina: No
ST Depression: 1.00

Diabetes Risk

Assess Heart Health



Diabetes Risk

Risk Analysis

Assess your risk for heart disease and diabetes using the calculators below. Enter your health parameters and view your results in the respective tabs.

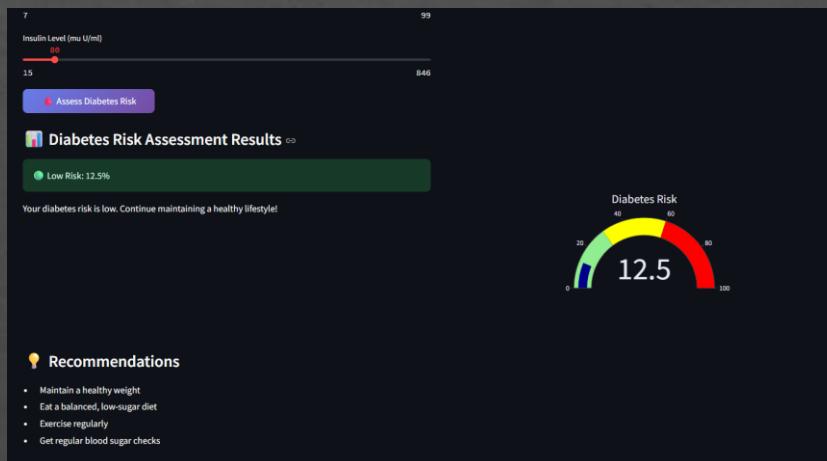
Heart Health

Number of Pregnancies: 1
Glucose Level: 120
Blood Pressure (mm Hg): 70
Skin Thickness (mm): 29
Insulin Level (mu U/ml): 14

BMI: 25
Diabetes Pedigree Function: 0.50
Age: 35

Diabetes Risk

Assess Diabetes Risk



04

DISEASE INFORMATION:

Offers clear information on diseases, medications, diet, and precautions.

 Disease Information Center

Select a disease to learn more:

- [Brain Tumour](#)
- Multiple sclerosis
- Anthrax
- [Brain Tumour](#)
- Hyperthyroidism
- Hepatitis A
- Coronavirus disease 2019 (COVID-19)
- Lupus erythematosus

 Disease Information Center

Select a disease to learn more:

- [Brain Tumour](#)

Description

A brain tumor is an abnormal growth of cells within the brain, which can be benign or malignant.

Medications

Surgery, Radiation therapy, Chemotherapy, Corticosteroids, Anti-seizure medications

Dietary Recommendations

Balanced diet, Hydration, Nutritional supplements, Small, frequent meals

Precautions

Seek immediate medical attention for symptoms, Follow recommended treatment plan, Manage symptoms and side effects, Seek support from healthcare professionals and support groups

Quick Facts

Disease Name: Brain Tumour

Category: General Health

Recommended Specialist

Neuro-oncologist/Neurosurgeon

05

AI CHATBOT SUPPORT:
Answers general health
questions in real-time
through a smart chatbot.

What are the symptoms of dengue fever?

As a health assistant, I'd be happy to help you with that!

Dengue fever is a viral infection that can cause a range of symptoms. The most common symptoms of dengue fever are:

1. High fever: A high temperature of 104°F (40°C) or higher, which can last for 2-7 days.
2. Joint and muscle pain: Pain in the joints, muscles, and bones, which can be severe.
3. Headache: A severe headache, which can be described as throbbing or pulsating.
4. Nausea and vomiting: Feeling queasy or vomiting due to the fever.
5. Rash: A characteristic rash, which can appear 2-5 days after the onset of the fever. The rash can be pink or red, and can spread to the entire body.
6. Fatigue: Feeling tired, weak, or lethargic.
7. Pain behind the eyes: Pain or discomfort behind the eyes, which can be severe.
8. Swollen lymph nodes: Enlarged lymph nodes in the neck, armpits, or groin.

In some cases, dengue fever can progress to a more severe form called dengue hemorrhagic fever (DHF), which can cause:

- Severe bleeding
- Low blood platelet count
- Increased risk of shock and organ failure

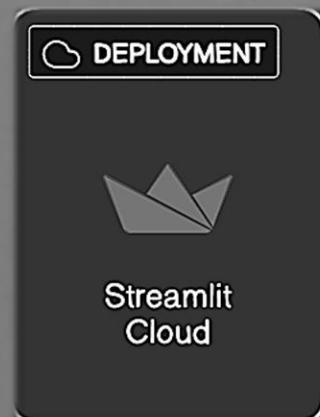
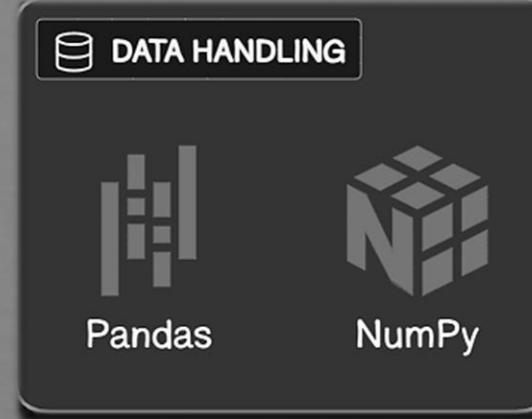
Ask your query here... ➤

Health Assistant

I'm not a licensed medical professional, but I can provide general information and answer questions about various health topics. Keep in mind that I'm not capable of diagnosing medical conditions or providing personalized advice.
If you have a specific concern or question, I'll do my best to:

1. Provide general information on the topic
2. Offer suggestions for further research or consultation with a healthcare professional

Technology Stack :



MVP Scope:

- Personalized Health Analysis
- Symptom checker
- Disease info display
- Risk Analysis
- Basic AI chatbot



Competitive Advantage:

- Comprehensive multi-tool app in one platform
- User-friendly interface
- Personalized AI responses
- Real-Time AI Chatbot for Health Queries
- Cost-effective & accessible 24/7

Meet the Team:



Usha Kiran Paruchuri



Jakka Charishma



Kakumanu Ravi Chandra



Mandadapu Prabhas

Github link: <https://github.com/UshaKiran31/Personalised-Health-Advisor>

Deployed link: <https://personalised-health-advisor.streamlit.app/>



Thank You!

~Empowering health, one user at a time.