Problem Statement:

Health Management Ecosystem

Al Based Complete Health Management and assistant solution that enhance health management and assistant solution

Detailed view of Problem Statement

Build Health Report Warehouse. Complete health history management system which stores real time feeds from different health management systems (ex Apollo, Tata 1mg, etc.).

360-degree view of health reports and statistics.

Fitness goal tracking and monitoring. The solution will leverage the user health records, wearable data and AI models to deliver real-time actionable insights.

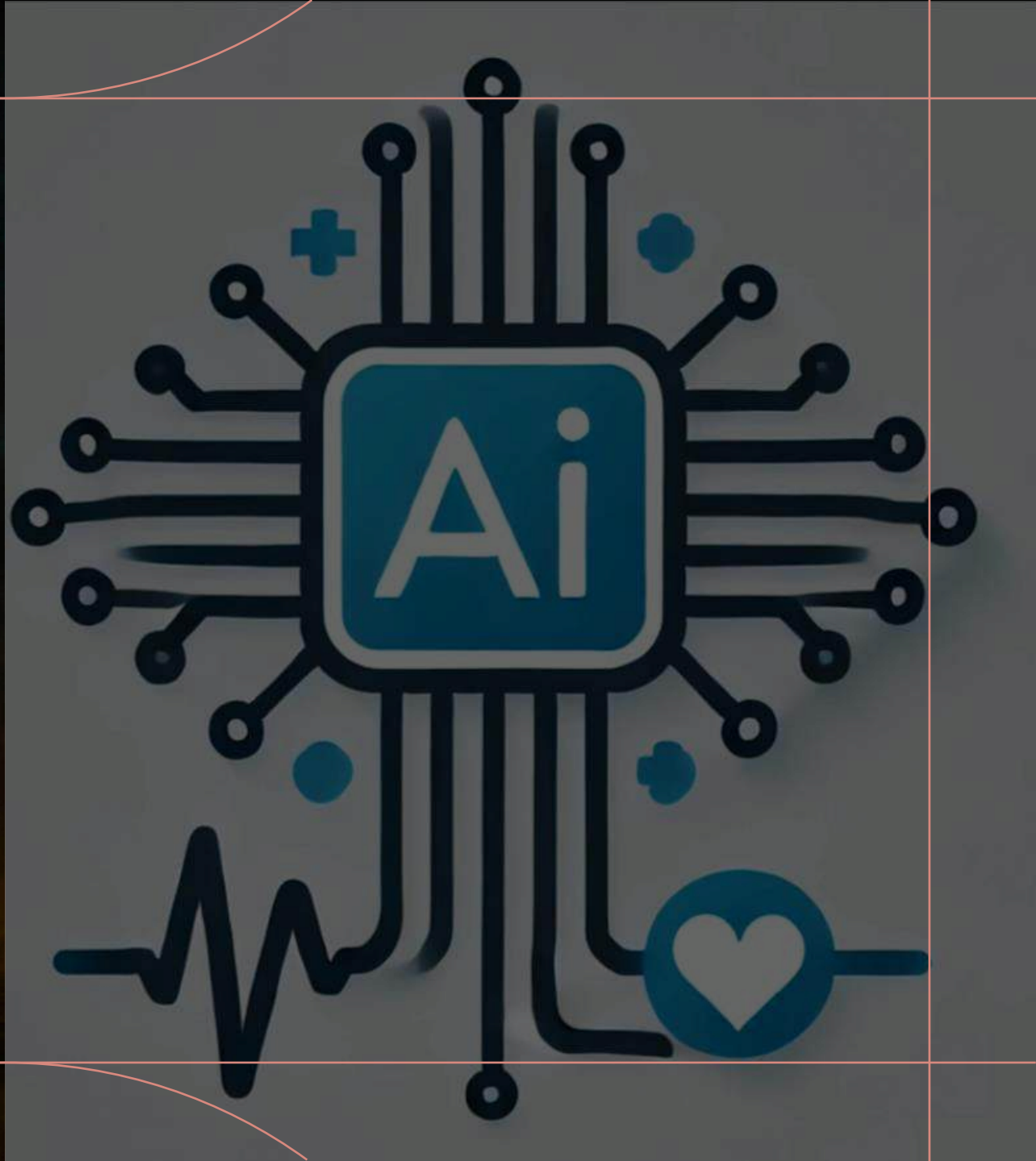
Build Smart AI Based Notification system for Medication reminder, report to do suggestion and many more.

Complete doctor solution in case of emergency. This is the core component where idea is to avoid doctor visits and get all prescription from AI based system. Multiple reviews system implemented to ensure suggested medications are full proof

In case doctor consultation required, system will and suggest corresponding best doctors and can book the appoints further

Integration with health care insurance organizations to provide coverage without raising any claim by user.

Team: Target_Reached



Team Members:

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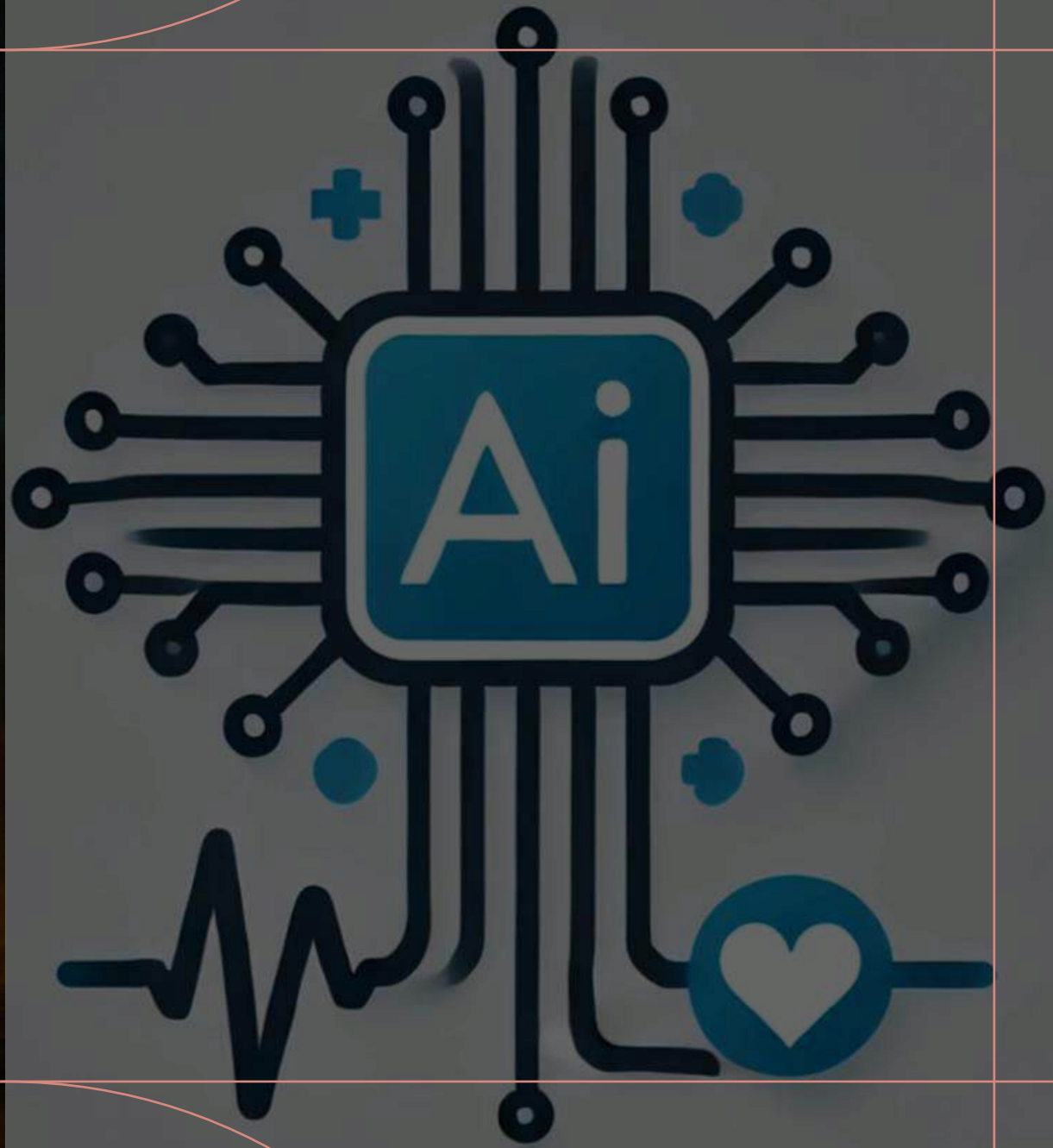
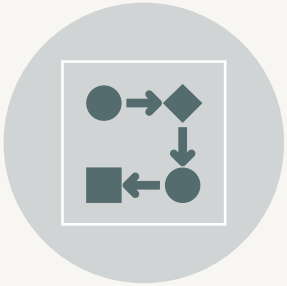


Solution Approach

Hackathon Project: AI-Based Virtual Doctor & Emergency Assistant

Overview



In this 48-hour hackathon, we followed all 5 phases of Design Thinking — Empathize, Define, Ideate, Prototype, and Test — to tackle a key problem in healthcare: delayed and inaccessible consultation during emergencies.

Our focus was on developing Point 5 from our larger healthcare solution: Virtual Doctor & Emergency System.

Phase Completed in 48 Hrs

1. AI Chatbot for Symptom Checking & Self-Triage

2. Natural language interface for users to input symptoms.

3. Follows up with questions to gather necessary medical data.

4. Dual Vital Input Options

5. Diagnosis Engine

6. Combines LLM and rule-based logic to suggest medications.

Human-in-Loop Prescription + Verification

- AI-generated suggestions are forwarded to a certified offline doctor.

- Doctor validates and finalizes the prescription (Rx).

- Verified prescription is shown to the user via the chatbot.

- Option to download or proceed with medicine delivery.

10-Minute Medicine Delivery Integration

- User selects home delivery after prescription approval.

- Chatbot sends prescription PDF to medicine delivery services (Apollo 24/7, Tata 1mg, Zepto).

- Smart delivery routing engine checks availability:

* If meds are available, deliver within 5–10 minutes.

* If unavailable, loops through partners until fulfilled.

- Ensures reliable and fast access to critical medication.

Future Roadmap

Upon real-world deployment, we will integrate all remaining modules:

- Health Report Warehouse

- 360° Health Dashboard

- Fitness Goal Tracking

- Smart AI Notification Engine

- Insurance Automation Layer

This will transform the prototype into a comprehensive AI Health Management Platform.

Key Benefits

- Faster Access to Care: Instant advice during emergencies.

- Reduced Waiting Time: Avoid long queues and delays.

- Lower Consultation Costs: Reduces need for physical visits.

- Verified Medical Advice: Human doctors validate AI outputs.

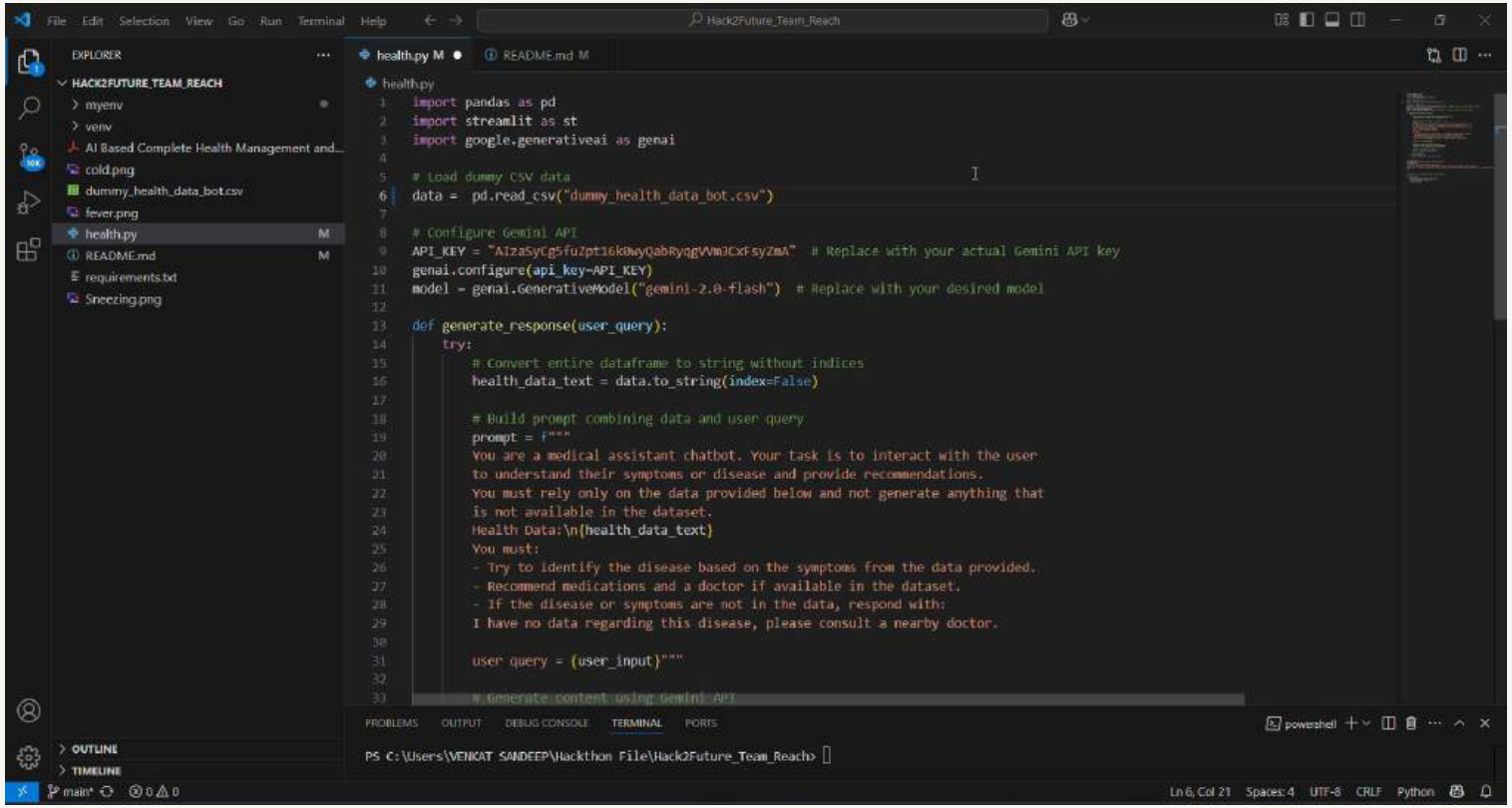
- Convenient Medicine Delivery: Meds delivered in 5–10 mins.

- 24/7 Accessibility: Always available via chatbot.

Stakeholders & Target Users

* Individuals in emergencies or rural locations
* Patients with low-risk conditions
* Elderly and chronic care patients
- Healthcare Providers:
* Doctors verifying AI recommendations
* Clinics and telehealth platforms
- Delivery Partners:
* Apollo 24/7, Tata 1mg, Zepto, etc.
- Insurance Companies (Future):
* For integrated claim and coverage handling
- Hospitals & Health-Tech Firms:
* To adopt scalable AI-based healthcare services

DEMO: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AI Based Complete Health Management and...
cold.png
dummy_health_data_bot.csv
fever.png
health.py M
README.md M
requirements.txt
Sneezing.png
health.py M
README.md M
health.py
import pandas as pd
import streamlit as st
import google.generativeai as genai
# Load dummy CSV data
data = pd.read_csv("dummy_health_data_bot.csv")
# Configure Gemini API
API_KEY = "AIzaSyCg5fu2pt16k0wyQabRyqgVVm3CxFsyZmA" # Replace with your actual Gemini API key
genai.configure(api_key=API_KEY)
model = genai.GenerativeModel("gemini-2.0-flash") # Replace with your desired model
def generate_response(user_query):
try:
# Convert entire dataframe to string without indices
health_data_text = data.to_string(index=False)
# Build prompt combining data and user query
prompt = f"""
You are a medical assistant chatbot. Your task is to interact with the user
to understand their symptoms or disease and provide recommendations.
You must rely only on the data provided below and not generate anything that
is not available in the dataset.
Health Data:\n{health_data_text}
You must:
- Try to identify the disease based on the symptoms from the data provided.
- Recommend medications and a doctor if available in the dataset.
- If the disease or symptoms are not in the data, respond with:
I have no data regarding this disease, please consult a nearby doctor.
user query = {user_input}"""
Generate content using Gemini API
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
powershell
PS C:\Users\VENKAT SANDEEP\Hackthon File\Hack2Future_Team_Reach>
OUTLINE
TIMELINE
main*
Ln 6, Col 21 Spaces: 4 UTF-8 CRLF Python

THANK YOU