

# AI-POWERED PERSONAL HEALTH ASSISTANT (CROCOHEATH)

Mohammed Hatem Abdelrahman Mostafa Mostafa Ahmed

### THE PROBLEM WE'RE SOLVING

- Remote work and sedentary lifestyle cause posture issues
- Improper gym form leads to injuries
- Lack of instant, accessible health advice
- No single Al-powered platform addresses all these issues

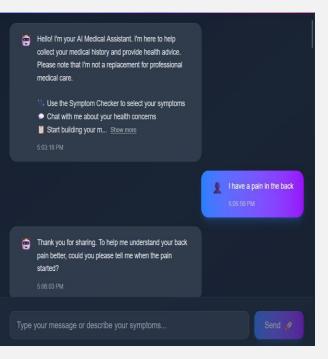


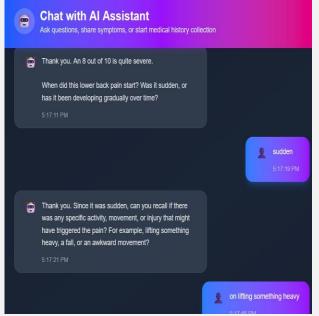
## FEATURE I – AI MEDICAL CHATBOT

- Built on Gemini 2.5 flash API
- Natural health conversation via chat
- Outputs:
- Health report summary
- Recommended medical tests
- Doctor specialty to consult
- Goal: Early detection and smarter health decisions



### INFORMATION GATHERING AND REPORT GENERATION





Thank you. The fact that you have no changes in bowel or bladder habits, no weakness, and no fever or chills is reassuring, as these can be signs of more serious conditions.

Based on the information you've provided – sudden, severe lower back pain (8/10) that started after lifting something heavy, radiates down your left leg to your foot, and causes tingling, and is worsened by sitting – it strongly suggests a potential \*\*nerve root compression\*\*, commonly known as sciatica, which is often caused by a disc issue (like a herniated or bulging disc) in your lower back.

Given the severity of your pain and the radiating symptoms, I would



### SPECIALIZED ADVICES



can you give me advices

5:22:15 PM



Certainly. While waiting to see the specialist, here are some practical advice points to help manage your symptoms and prevent further strain:

- 1. \*\*Mindful Movement:\*\*
- \* \*\*Avoid Bending, Twisting, and
  Lifting:\*\* These movements can put
  significant strain on your lower back
  and potentially aggravate the nerve.
  When you need to pick something
  up, bend at your knees and keep
  your back straight, but ideally, avoid
  lifting anything heavy at all right now.

  \* \*\*Limit Prolonged Sitting:\*\* As you
- mentioned, sitting worsens your pain. Try to limit sitting to short

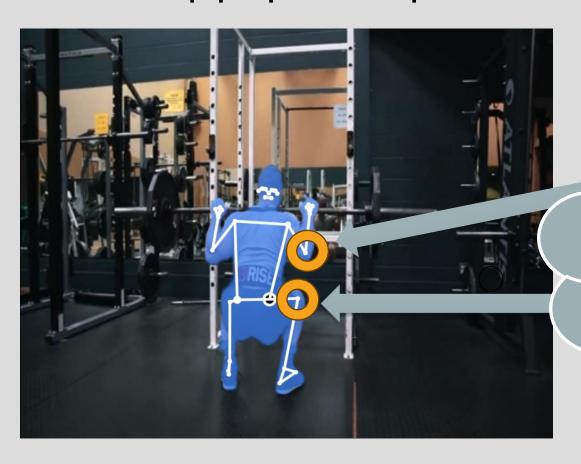
CrocoHealth

## FEATURE 2 – GYM WORKOUT FORM CHECKER

- Powered by MediaPipe Pose + feedback logic
- Detects key workouts (squats, pushups, etc.)
- Provides real-time alerts on form errors
- Helps prevent injuries and improve performance



### Mediapipe pose output:



EX. In the squat knee and elbow angles are calculated and the form is assessed accordingly



### FEATURE 3 - POSTURE COACH

- Uses webcam to track upper body posture
- Detects head tilt, slouching, leaning
- Gives alerts like:
  - 'STRAIGHTEN HEAD'
  - 'SIT UP STRAIGHT'
- Encourages daily posture awareness



SIT UP STRAIGHT!

LOOKS GOOD





STRAIGHTEN HEAD!





#### **IMPACT & VISION**

- Encourage preventive healthcare
- Reduce workout injuries
- Improve ergonomic habits
- Future: Add meal plans, wearable sync, telehealth booking
- $\rightarrow$  Al as your everyday health companion



#### THANK YOU

- Let's build the future of preventive health with Al.
- Team:TAMASEE7:

Mohammed Hatem

Abdelrahman Mostafa

Mostafa Ahmed

