



# DOCMA E

## THE DOCTOR'S ALLY

### PROBLEM STATEMENT 1:

**DOCTOR DASHBOARD** - BUILD A WEB-BASED INTERFACE THAT INCLUDES THE FOLLOWING FEATURES:  
**PATIENT DETAILS VIEWER**: DISPLAY RELEVANT PATIENT INFORMATION SUCH AS NAME, AGE, DIAGNOSIS, HISTORY, ETC.  
**PRESCRIPTION GENERATOR**: AN AUTO-GENERATE PRESCRIPTION BASED ON SYMPTOMS OR DIAGNOSIS POWERED BY AI.  
**MCP SERVER**: IMPLEMENT AN MCP SERVER TO ENHANCE THE DOCTOR'S EXPERIENCE WHILE USING THE PRESCRIPTION GENERATOR.

**PRESENTED BY**  
**TEAM BINARY BUGS:**

1. APURB SUSOBHIT BABA
2. SUSHMITA
3. AMIT KUMAR PRAJAPATI
4. ABHILASH DASH





# PROBLEM STATEMENT

DOCTORS OFTEN FACE A HIGH VOLUME OF PATIENTS, WHICH LEADS TO TIME CONSTRAINTS AND BURNOUT. REPETITIVE TASKS LIKE WRITING PRESCRIPTIONS OR CHECKING PATIENT HISTORY SLOW DOWN CARE DELIVERY."

- TIME-CONSUMING MANUAL PRESCRIPTIONS.
- INCONSISTENT TREATMENT FORMATS.
- LACK OF DIGITAL PATIENT HISTORY IN SMALL CLINICS.

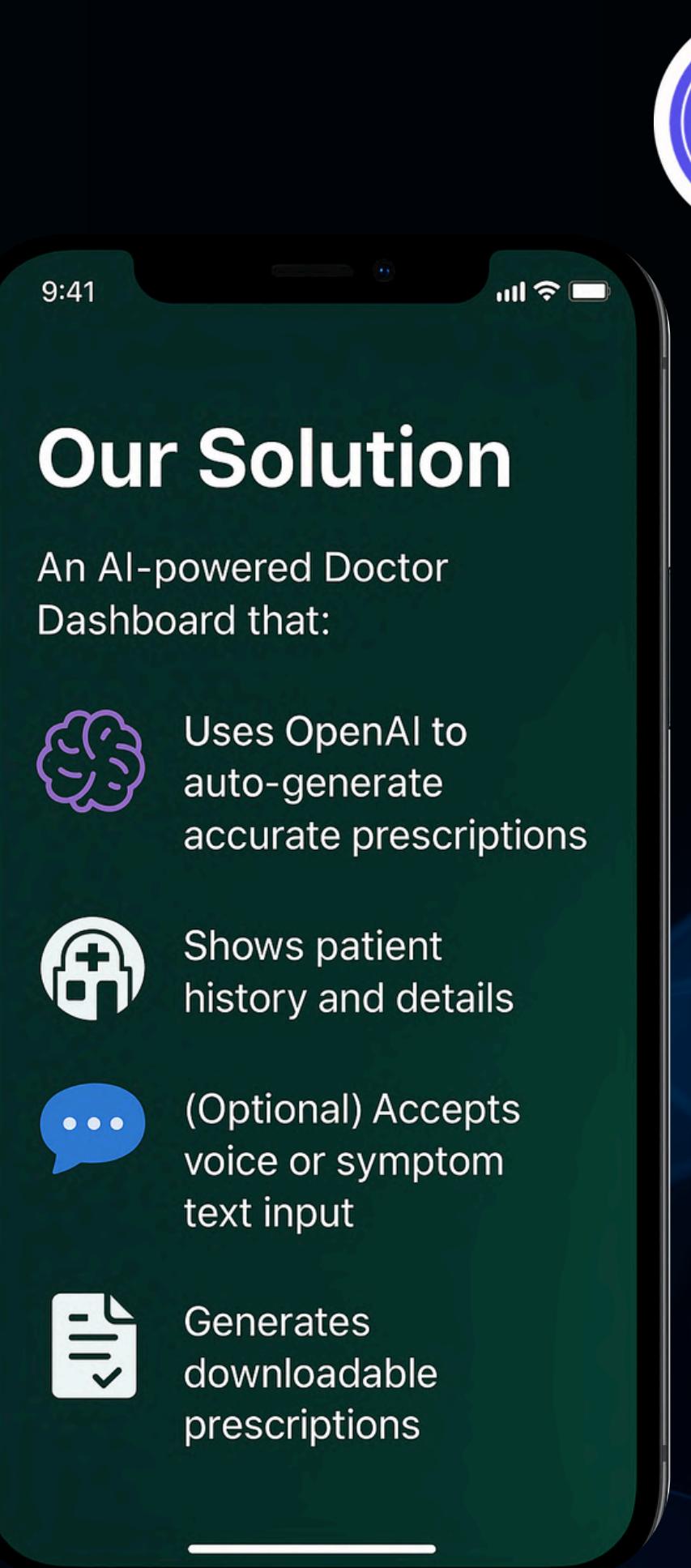


# OUR SOLUTION

## AN AI-POWERED DOCTOR DASHBOARD

THAT:

- 🧠 USES THE MCP SERVER TO AUTO-GENERATE ACCURATE PRESCRIPTIONS WITH OPENAI.
- 🏥 SHOWS PATIENT HISTORY AND DETAILS.
- 📄 GENERATES DOWNLOADABLE PRESCRIPTIONS.



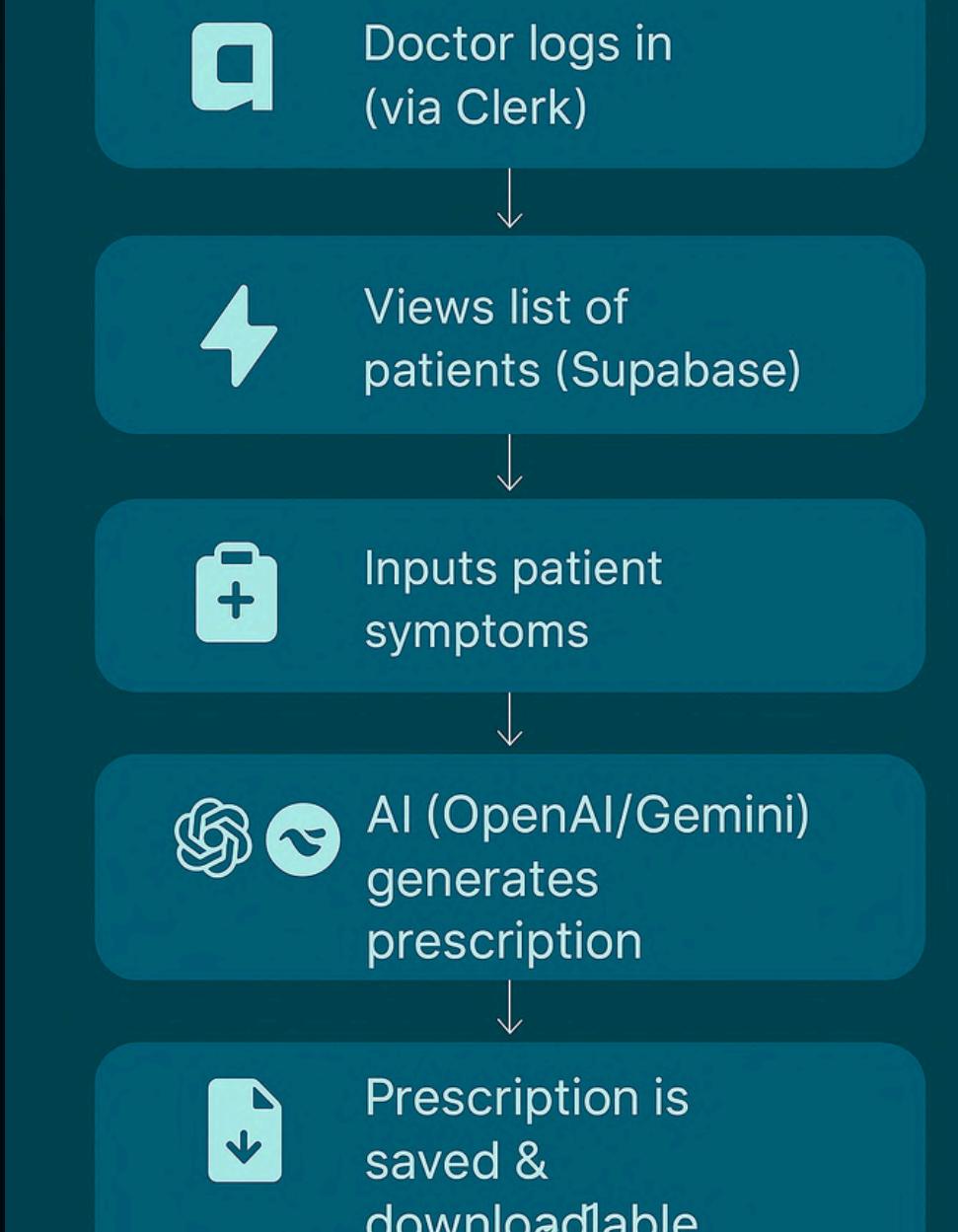


# FEATURES DEMO: FLOWCHART

## USER FLOW:

- DOCTOR LOGS IN (VIA CLERK)
- VIEWS LIST OF PATIENTS (SUPABASE)
- INPUTS PATIENT SYMPTOMS
- AI (OPENAI/GEMINI) GENERATES PRESCRIPTION
- PRESCRIPTION IS SAVED & DOWNLOADABLE

### User flow diagram



# TECHNICAL STACK



## FRONTEND:



REACT, TYPESCRIPT, VITE,  
JAVASCRIPT, TAILWINDCSS, HTML



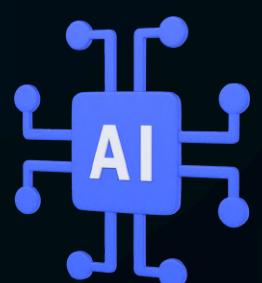
## BACKEND:

NODE.JS + EXPRESS.JS

## DATABASE:



SUPABASE (POSTGRESQL)



## AI MODELS:

OPENAI GPT

GEMINI API (OPTIONAL)



## AUTHENTICATION:

CLERK



# AI PRESCRIPTION MODULE



🎯 PROMPT ENGINEERING FOR SYMPTOMS →  
PRESCRIPTION

✓ RETURNS: MEDICINE NAME, DOSAGE,  
DURATION, INSTRUCTIONS

🧠 USES OPENAI'S GPT FOR NATURAL,  
CONTEXTUAL PRESCRIPTIONS

PROMPT EXAMPLE:

"PATIENT  
GENERATE  
A  
PRESCRIPTION."

SYMPTOMS: FEVER,  
COMPLETE

COUGH.  
MEDICAL



# INNOVATION & IMPACT



## INNOVATION:

COMBINES PATIENT DATA + AI + REAL DOCTOR  
WORKFLOW

USES MODERN STACK (SUPABASE + CLERK + GPT)

CLEAN UI WITH REACT/VITE

## IMPACT:

SAVES TIME FOR DOCTORS

PREVENTS MANUAL ERROR

HELPS SMALL CLINICS ADOPT TECH



# LEARNINGS & CHALLENGES



## 🛠 CHALLENGES:

PROMPT TUNING  
PRESCRIPTIONS      FOR      ACCURATE  
DATA SYNCING WITH SUPABASE  
AUTHENTICATION INTEGRATION WITH CLERK

## 🎓 LEARNINGS:

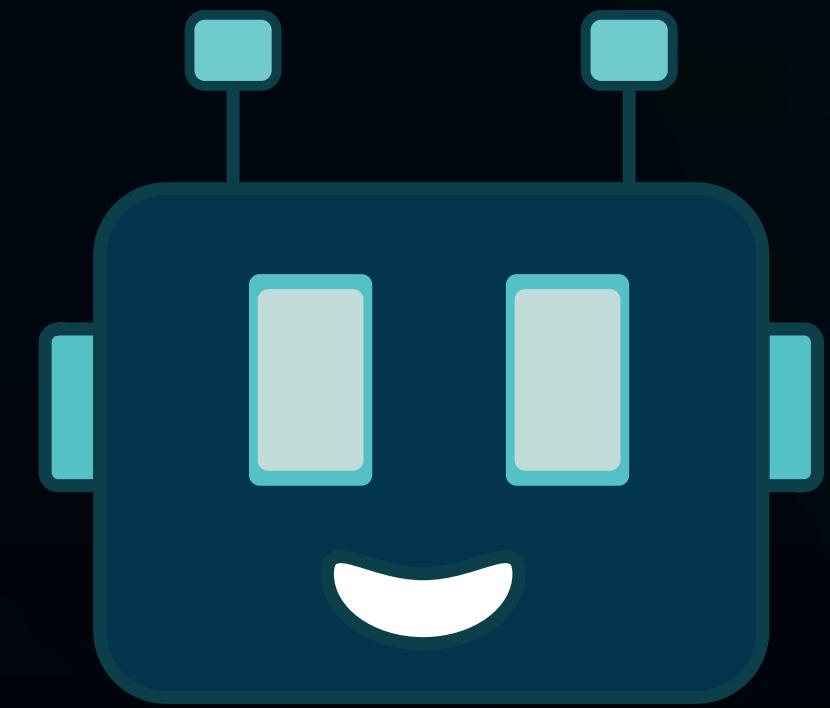
PRACTICAL AI IMPLEMENTATION WITH OPENAI  
REAL-TIME API INTEGRATION WITH REACT  
FULL-STACK PROJECT DEPLOYMENT (SAAS APP)

# FUTURE SCOPE



- 🧠 ADD VOICE-TO-TEXT FOR SYMPTOM ENTRY (WHISPER)
- 📊 ADD ANALYTICS FOR MOST PRESCRIBED MEDICINES
- 🌐 MULTILINGUAL AI RESPONSE (HINDI, ETC.)
- 💬 AI CHATBOT ASSISTANT FOR PATIENTS
- 🔒 END-TO-END DATA ENCRYPTION





**THANK YOU!**  
FOR YOUR ATTENTION