KEC HACKATHON 2025

- **Problem Statement ID – PSB2**
- **Title - Telemedicine Integration**
- **Domain –WEB DEVELOPMENT**
- **Team Name – CODE BREAKERS**
- **Team Lead Name – GOKULRAMM S**
- **College – KGISL INSTITUTE OF TECHNOLOGY**

TEAM MEMBERS

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TeleMedX – AI-Powered Smart Telemedicine Platform

Proposed Solution :
A New level telemedicine platform that provide **Real-Time Video Consultation,AI-Powered Symptom Analysis,Seamless Pharmacy Integration** for instant medicine delivey and Emergency Alert System

Key Features:
- Live Video & Audio Consultations
- Smart Prescription & Pharmacy Integration
- AI-Powered Symptom Analysis
- Emergency Visual Guidance
- EHR (Electronic Health Records)

TECHNICAL APPROACH

Technologies Used:

- **Frontend:** React.js,Tailwind CSS
- **Backend:** Python – Flask (Framework)
- **Database:** MySQL(EHR Storage)
- **AI/ML:** TensorFlow, OpenAI API (for chatbot & symptom analysis)
- **Video Consultation:** WebRTC, Twilio API

Implementation Methodology:

AI Symptom Checker & Consultation Booking

Doctor Consultation (Video Call + Smart Prescription)

Medicine Ordering & Home Delivery Tracking

Emergency Assistance & Visual Guides

Patients Report Monitoring For Timely Recommendation

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FEASIBILITY AND VIABILITY

Challenges & Solutions:

• Internet Connectivity in Rural Areas:

-**Low-bandwidth video calls** + offline consultation modes (chat-based AI).

• Medical Data Privacy:

-**Blockchain-based encrypted storage** ensuring HIPAA compliance.

• Doctor Availability Issues:

-AI-assisted **scheduling optimization** for reduced waiting time.

IMPACT AND BENEFITS

- **Immediate doctor access** from anywhere, reducing unnecessary hospital visits.
- **Faster emergency response** with AI-powered **first-aid assistance**.
- **Automated medicine delivery** eliminates pharmacy visits.
- **AI-driven symptom checker** helps in **early disease detection**.
- **Visual Hospital** helps the Old Age People That they No Need to Travel Lot

RESEARCH AND REFERENCE

- AI in Telemedicine:
        Global Perspective on AI in Telemedicine-
https://pubmed.ncbi.nlm.nih.gov/38436235
https://pmc.ncbi.nlm.nih.gov/articles/PMC6697552
-        HER:
https://www.infosysbpm.com/blogs/healthcare/healthcare-data-privacy-and-security-can-blockchain-come-to-the-rescue.html
- Emergency Visual Guidance and First-Aid AI Assistant:
https://pmc.ncbi.nlm.nih.gov/articles/PMC9118431

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