WELCOME

Your Health, Our Innovation

Prime Innovators

Solution/Project Idea Description

1. Problem Statement:

Access to timely and accurate medical consultations is a significant challenge, especially in remote areas. Many patients struggle with long waiting times, difficulty in finding specialists, and a lack of Al-driven diagnostics. Additionally, doctors often require advanced tools for medical image analysis and efficient patient management.

2. Problem Solution:

An Al-powered healthcare platform with separate logins for patients and doctors, enabling appointment booking, virtual consultations, Al-driven disease prediction, medical image analysis, and a blog section for health awareness.

3. Idea Working:

- **Patients:** Sign up, book doctor appointments, consult via video calls, and receive AI-based disease predictions based on symptoms and medical images.
- Doctors: Manage appointments, provide consultations, analyze medical images with Al assistance, and contribute to a blog for patient education.
- Secure Video Consultation: Patients and doctors can connect through a HIPAA-compliant video calling system for remote diagnosis.
- Al Integration: The disease prediction model analyzes symptoms, medical history, and images to provide insights.

4. Existing Solution:

- Practo, Zocdoc: Offer doctor appointment booking but lack AI-powered diagnosis.
- **WebMD Symptom Checker:** Provides self-diagnosis without medical image analysis or doctor consultation.
- Telemedicine Platforms (Teladoc, Amwell): Provide virtual consultations but lack AI-driven medical insights.

Objectives Design

For Patients:

Appointment Booking – Schedule consultations with available doctors

Al-Powered Disease Prediction – Input symptoms for Al-based diagnosis.

Medical Image Analysis – Upload scans for Al-powered interpretation.

Video Consultation – Secure video calls with doctors.

Blog Section – Access articles on health awareness and tips.

For Doctors:

Manage Appointments – View, accept, and schedule consultations.

Consultation Dashboard – See patient history, Al predictions, and medical images.

Build

Frontend: React.js, Tailwind CSS for styling

Backend: Node.js with Express.js.

Database: MongoDB (for storing user data,

medical records, and appointments). **Al/ML Models:** Python with

TensorFlow/PyTorch for disease prediction & medical image analysis.

Authentication: JWT-based authentication for secure login.

Video Call Feature: WebRTC or Twilio API integration.

Integrate/Test

- API Testing Validate backend endpoints using Postman
- Al Model Evaluation Ensure accuracy and performance of disease prediction & medical image analysis
- User Testing Gather feedback from test users (patients & doctors) before launch.

Features

Al-Powered Disease Prediction

Patients input symptoms, and AI predicts possible diseases with a risk score, helping with early diagnosis and informed decisionmaking.

02

Medical Image Analysis

Al scans medical images (X-rays, MRIs) to detect abnormalities, assisting doctors in faster and more accurate diagnoses.

03

Secure Video Consultation

Patients can book appointments and consult doctors via video calls, improving accessibility and reducing wait times.

Stability and Future Potential

\$ Future Enhancements:

- Advanced AI Diagnostics Improve disease prediction accuracy using federated learning and real-time health data.
- Wearable Device Integration Sync with smartwatches for continuous health monitoring.

Additional Features:

- E-Prescriptions & Medicine Delivery Automate prescription generation and partner with pharmacies for direct medicine delivery.
- Multilingual Support Expand accessibility by incorporating language translation for global reach.

Vision & Growth:

 Scale the platform with blockchain for secure health records and Al-driven treatment recommendations



Team Members



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THANKS!

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