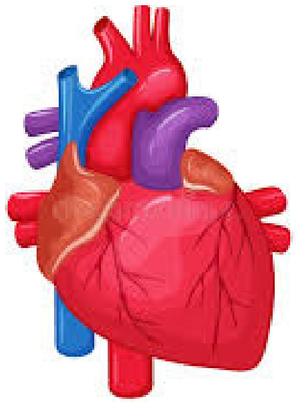
SIH — Smart India Hackathon

TEAM NAME: CODE BREAKERS

Devraj Saini	(2023UCA1926)
Harry Bharti	(2023UCA1948)
Swayam Prakash	(2023UCA1891)
Ayush Bhardwaj	(2023UCA1951)
Sneha Manohar	(2023UCA1930)
Ananya Aggarwal	(2023UCA1882)

INTERNAL PS:

AI-ENHANCED HEALTHCARE DIAGNOSTICS AND MANAGEMENT SYSTEM



PROBLEM STATEMENT

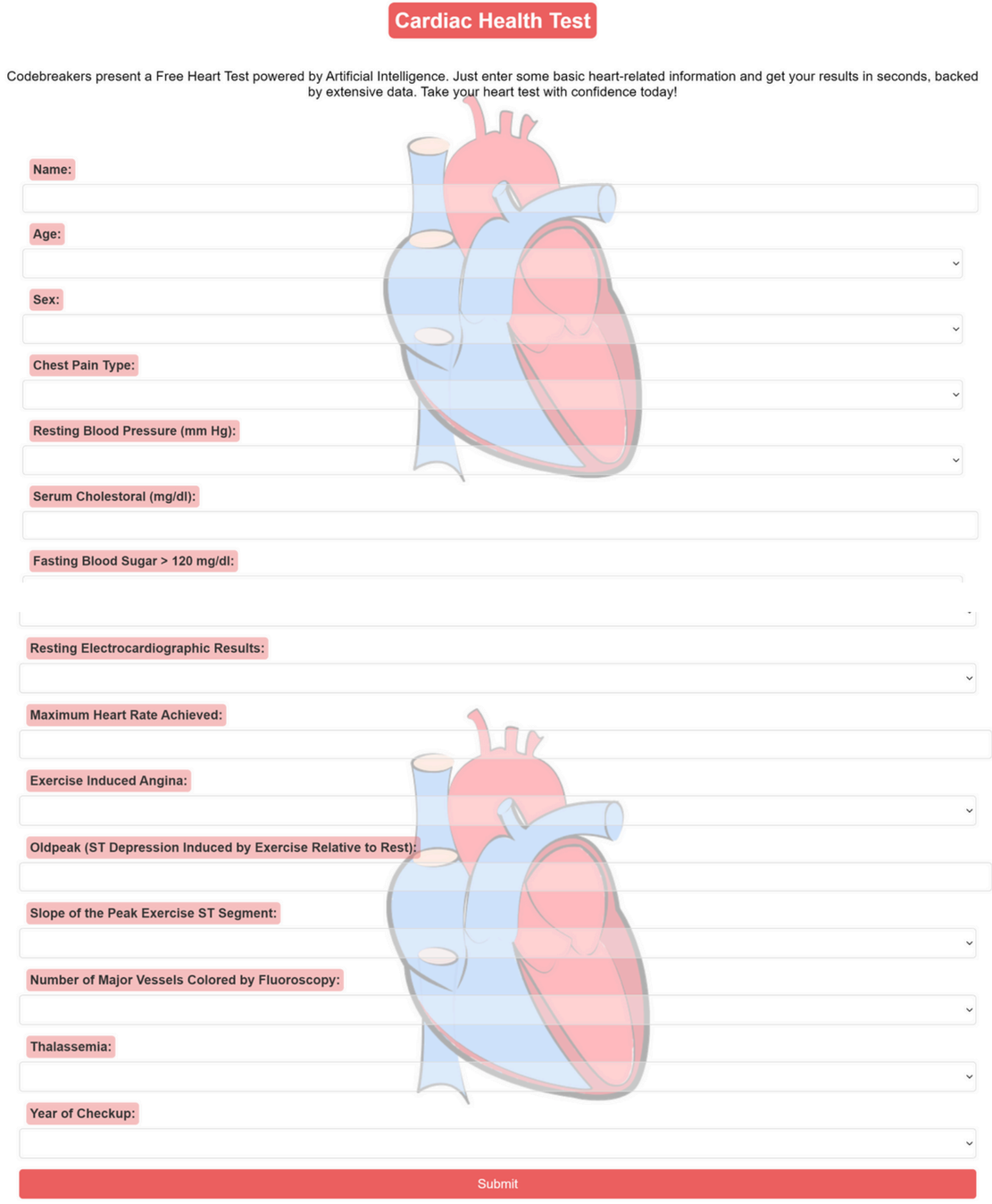
- AI-Enhanced Healthcare Diagnostics and Management System inspired by ZK Medical Billing Platform

OBJECTIVE:

- Develop an advanced healthcare diagnostics and management system leveraging AI/ML technologies, inspiration from the ZK Medical Billing Platform.
- Aim to enhance medical diagnostics, patient management, and treatment planning.
- Utilize intelligent data analysis and automation for improved healthcare outcomes.

PROPOSED SOLUTION

- Developed an AI-integrated Cardiac Health Test for preventive healthcare.
- Provides personalized, real-time assessments of cardiovascular health based on user-inputted parameters.
- Users input heart-related metrics such as blood pressure and cholesterol levels into the platform.
- AI algorithms deliver precise insights for early detection of potential heart issues.
- Enables individuals to take proactive measures in managing their heart health.
- Accessible through a user-friendly online platform for convenient cardiovascular monitoring.
- AI component continuously learns from new data, ensuring health assessments stay up-to-date with the latest medical knowledge.
- Offers scalable integration opportunities with healthcare providers, insurers, and corporate wellness programs.



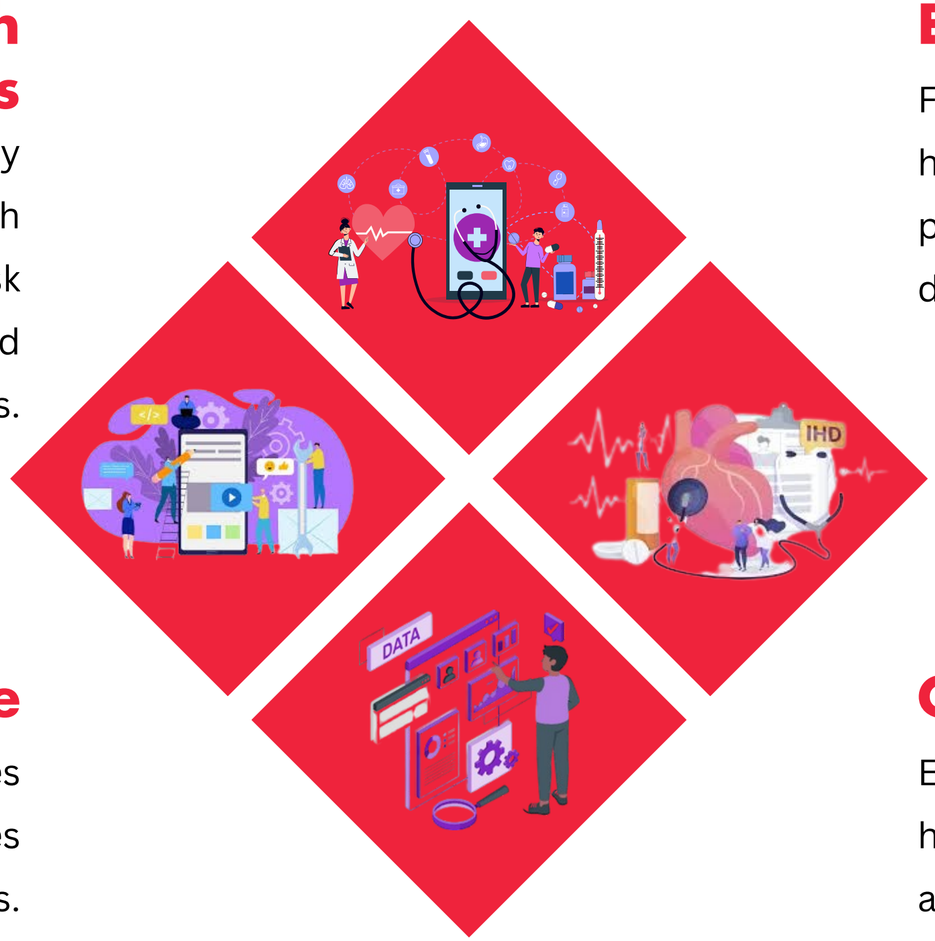
USPs

Personalized Health Insights

Delivers customized feedback by analyzing individual heart health parameters, providing personalized risk assessments and tailored recommendations.

Early Detection

Facilitates early detection of potential heart issues, enabling users to take preventive actions before symptoms develop.



User-Friendly Interface

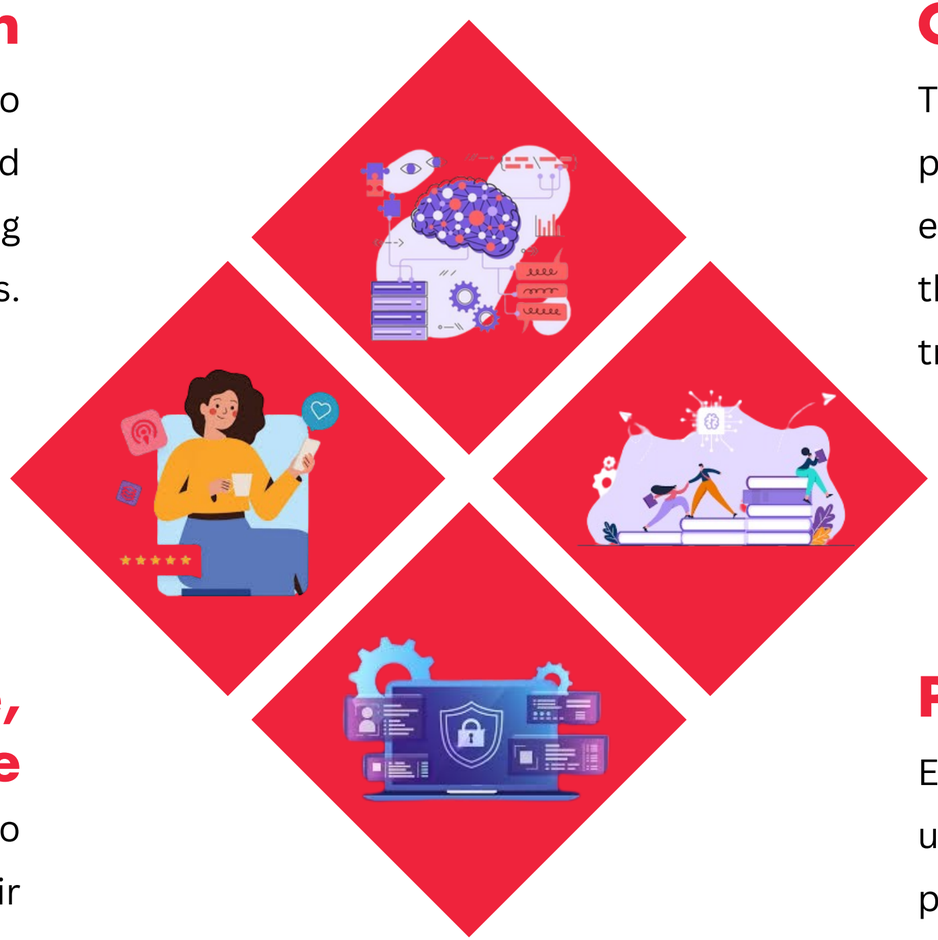
User-friendly platform that enables quick data entry and provides immediate, easy-to-understand results.

Comprehensive Analysis

Evaluates a comprehensive set of heart health indicators to ensure a thorough assessment of cardiovascular health.

AI-Driven Precision

Employs advanced AI algorithms to deliver more accurate and nuanced heart health assessments, minimizing the risk of diagnostic errors.



Continuous Learning

The AI model continually enhances its performance by learning from new data, ensuring the test remains current with the latest medical knowledge and trends.

Accessible Anytime, Anywhere

Accessible online, allowing users to check their heart health status at their convenience, without the need for an in-person visit to a healthcare provider.

Privacy-Focused

Ensures user data is handled with the utmost confidentiality, giving users peace of mind regarding their health information.

BUSINESS MODEL

Target Market

- **Consumers**: Health-conscious individuals, especially those with family history of heart diseases or existing cardiovascular concerns.
- **Healthcare Providers**: Clinics, hospitals, and telehealth platforms looking to enhance their diagnostic tools with AI-powered insights.
- **Employers**: Companies interested in incorporating health and wellness tools into employee benefit programs.
- **Insurance Companies**: Insurers aiming to cut costs with preventive health solutions.

Revenue Streams

- **Corporate Partnerships**: Collaborate with employers or health insurance companies to include the test in employee wellness programs.
- **B2B Sales**: License the AI technology to healthcare providers, clinics, or hospitals to integrate into their services.
- **Data Analytics Services**: Offer anonymized health data analytics to research institutions or pharmaceutical companies for a fee, ensuring strict data privacy.

Key Activities

- **AI Development & Maintenance**: Continuously develop and refine the AI algorithms to enhance accuracy and insights.
- **Platform Development**: Maintain and improve the website and mobile app to ensure a seamless user experience.
- **Marketing & Sales**: Execute targeted marketing campaigns to attract users and build brand awareness and manage relationships with healthcare providers, insurers, and corporate clients.
- **Regulatory Compliance**: Ensure adherence to health data privacy and medical device regulations.

Revenue Streams

- **AI Development and Maintenance**: Ongoing costs for R&D, model training, and updates.
- **Platform Development**: Costs associated with web and app development, hosting, and security.
- **Marketing and Sales**: Budget for digital marketing, partnerships, and customer acquisition.
- **Compliance and Legal**: Costs related to ensuring compliance with medical regulations and data protection laws.

This business model is designed to position our AI-integrated Cardiac Health Test as a leading solution in preventive healthcare, with multiple revenue streams and strong growth potential.

TECH STACK

Programming Languages

- Python
- HTML
- JavaScript
- CSS

Front-end tools

- Figma
- HTML
- CSS
- JavaScript

Back-end tools

- Jinja2
- Flask

AI

- Matplotlib
- Scikit-learn
- Logistic Regression

THANK YOU