Heart Disease Prediction

A Web App that let you know your Heart.

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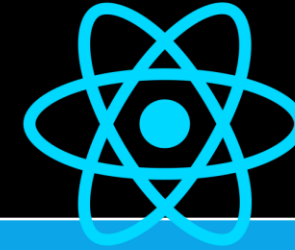- Live Demo / Video

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Introduction

- A group of conditions affecting the heart, including coronary artery disease, heart attacks, and arrhythmias.

- Early prediction can help in **preventive measures and timely treatment**.

- To build an **ML-based predictive model** that helps in identifying individuals at risk.

Web App Architecture
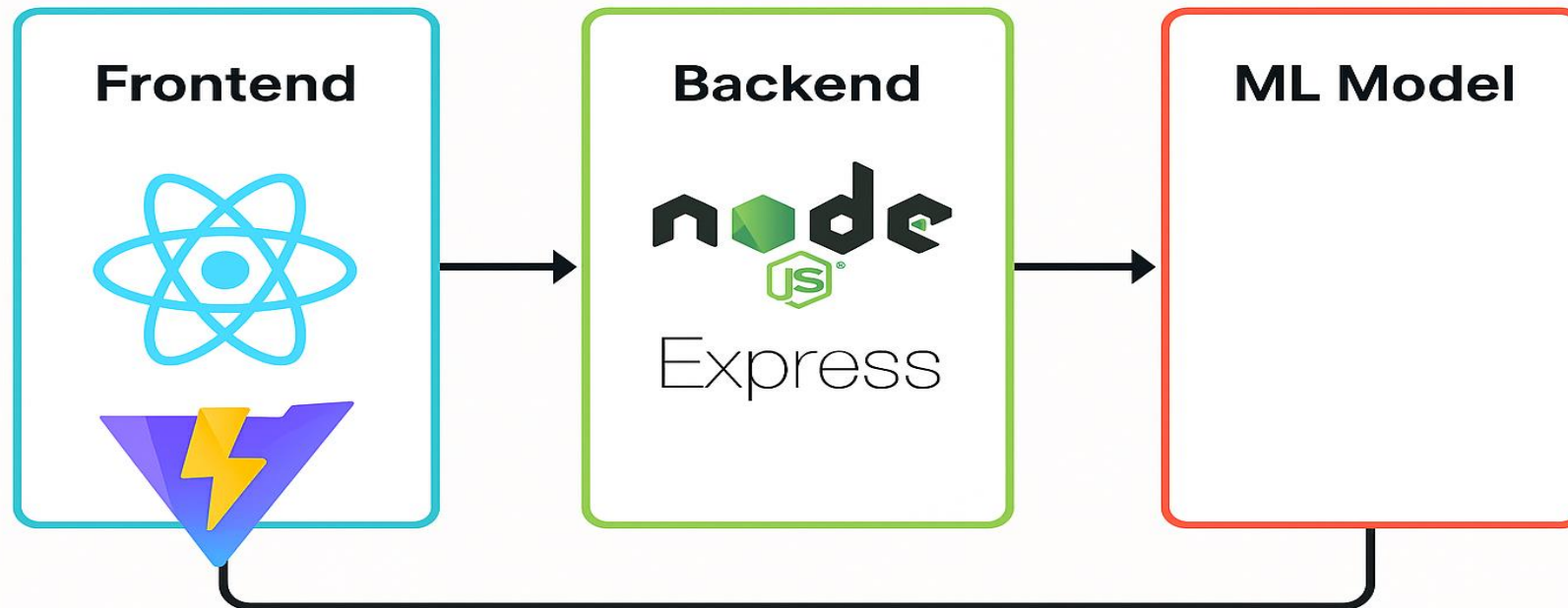
Frontend Technologies

React for building UI components.

Vite used as a fast development and build

Benefits of using React :

reusability   SPA experience

UI Overview

Check Up   About   Developers   Contact

Know Your
Heart

"A place that lets you know your Heart's Health"

Input Fields

- **Prediction**

Backend Technologies

Node.js used for server-side scripting

Express used to handle API routes

The main endpoints:

POST route to receive input from frontend

Route that calls the ML model for prediction

Integration With ML Model

User fills the form on the frontend, which collects the data as an object.

Frontend sends this data to the backend via a POST request (e.g., using Axios or Fetch).

Backend extracts features from the request and passes them to the ML model for prediction.

Prediction result is sent back to the frontend and displayed to the user.

Live Demo

Deployment

- The web application is deployed on RENDER

[Heart Disease Prediction](#)

Challenges Faced

- Feature Selection

- Model Accuracy

- Web App Integration of .pkl File

- Deployment of backend

Future Improvements

- Add a Login/Sign Up Page.

- User Dashboard

- AI Assistant

- Provide remedies

Conclusion

- This project demonstrates how machine learning and modern web technologies can come together to create a powerful, user-friendly tool for predicting heart disease risk. It bridges the gap between AI and real-world healthcare applications. With future improvements like user login and data storage, it has the potential to become an even more valuable tool for preventive care.

THANK YOU