Empathy Map Canvas

Project Title: Revolutionizing Liver Care: Predicting Liver Cirrhosis

Date: 31 January 2025

Empathize & Discover

Project Overview

This project focuses on transforming liver healthcare through early prediction of liver cirrhosis. Using patient data, machine learning algorithms are employed to detect early signs of cirrhosis, enabling proactive treatment and better patient outcomes.

Problem Statement

Liver cirrhosis is a chronic condition that progresses silently until it reaches an advanced stage. There is a lack of predictive tools that can alert clinicians before irreversible liver damage occurs.

Proposed Solution

A predictive model is developed using patient demographic, biochemical, and clinical data to forecast the likelihood of liver cirrhosis. Machine learning helps identify patterns and provide early alerts to healthcare providers.

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Says

- I feel fine, I don't need regular checkups.
- Symptoms will go away on their own.

Thinks

- What if this is something serious?
- I wish I had access to better healthcare information.

Empathy Map Canvas

Does

- Delays hospital visits until symptoms worsen.
- Searches for symptoms online.

Feels

- Anxious about health conditions.
- Helpless due to lack of early diagnosis tools.

Technologies Used

Python, Scikit-learn, Pandas, NumPy, Flask, Jupyter Notebook, Medical Datasets, Data Visualization tools

Impact & Conclusion

This system empowers clinicians with early diagnostic insights, enabling timely interventions and reducing mortality rates. It integrates AI into preventive healthcare to revolutionize liver care.