Revolutionizing Liver Care: Predicting Liver Cirrhosis using Advanced Machine Learning Techniques

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

a. **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

b. **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

c. **Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

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Define your problem statement

In clinical environments, particularly in rural and underserved regions, diagnosing liver cirrhosis early remains a serious challenge. Conventional methods like liver biopsy and FibroScan are often costly and inaccessible. This creates a need for a reliable and scalable solution that can predict liver cirrhosis risk based on clinical and biochemical data using AI-based tools

Brainstorm

1. Develop machine learning model(e.g., Random Forest, SVM, XGBoost) for liver cirrhosis prediction.

2. Explore deep learning models if larger datasets are available for better accuracy.

3. Deploy the model using a Flask-based web application for real-time access.

Shaika subhani

Shaik Shabbe Afroz

Sivakoti Tulasi Priyae
Shaik Habeeb

Group ideas

Shaik Subhani (Team Lead) and Tulasi suggested using machine learning models for their balance of accuracy and explainability, along with web integration for ease of access. Afroz and Habeeb proposed exploring deep learning approaches to improve diagnostic accuracy through more complex data representations. After a collaborative discussion, the team unanimously decided to proceed with a machine learning-based solution and deploy it as a Flask web application, ensuring both effectiveness and usability

Prioritize

Criteria	Idea:ML+Flask Web App
Feasibility	High
Impact	High
Resources	Medium
Priority	Priority 1-Selected Idea

Need some inspiration?

See a finished version of this template to kickstart your work.

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