PROJECT PROPOSAL

1. Project Title:- Explainable AI in Medical Diagnosis.

2. Project Scope:-

The scope of the Explainable AI Diagnostic Assistant (XAI-DA) project encompasses the development of a comprehensive system designed to enhance the interpretability and transparency of AI-driven medical diagnostics. This project aims to bridge the gap between complex AI models and their practical application in clinical settings by providing clear, actionable explanations for AI predictions. The XAI-DA will integrate seamlessly with existing AI diagnostic tools, incorporating advanced explanation techniques such as SHAP, LIME, and visualization tools like Grad-CAM and saliency maps. The system will feature a user-friendly interface that presents these explanations in an intuitive manner, enabling clinicians to better understand and trust AI-driven insights. Additionally, the project includes the implementation of robust data protection measures to ensure compliance with healthcare regulations and the establishment of a feedback mechanism for continuous improvement. The scope covers the end-to-end development process, from system design and integration to testing, deployment, and training. By addressing the need for transparency in AI diagnostics, the XAI-DA project aims to improve clinical decision-making, foster greater adoption of AI technologies in healthcare, and ultimately enhance patient care outcomes.

3. Requirements: -

O Hardware Requirements

There is no specific hardware requirements since the GPUs can be accessed virtually using Google Colab or Kaggle Accelerator

O Software Requirements

1. Tensorflow/Keras
2. NLP
3. Gradio
4. Google Colab
5. SHAP

STUDENTS DETAILS

Name	UID	Signature
Sonika Devi	21BCS8269	
Aryan Sharma	21BCS5820	

APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)
Dr. Monica Luthra	Project supervisor	