Project Initialization and Planning Phase

Date	02 October 2024
Team ID	740031
Project Title	OptiInsight - Revolutionizing Ophthalmic Care With Deep Learning For Predictive Eye Disease Analysis
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

Our solution leverages deep learning models to analyze ophthalmic data, enabling early detection and prediction of eye diseases. By integrating AI with medical imaging, we aim to enhance diagnostic accuracy and improve patient care outcomes.

Project Overview	
Objective	To revolutionize ophthalmic care by providing personalized eye disease predictions based on patient data, enhancing early detection and improving healthcare outcomes.
Scope	This project focuses on developing a deep learning model to analyze ophthalmic images for early disease prediction. It can be extended to assist ophthalmologists in diagnosis and integrate with healthcare systems for large-scale screening.
Problem Statement	
Description	This project employs deep learning algorithms to analyze ophthalmic data for predicting eye diseases. By using medical imaging, it aims to assist healthcare professionals in early diagnosis.
Impact	The project enhances healthcare by enabling early detection of eye diseases, reducing the risk of severe complications. It empowers medical professionals with AI-driven insights for accurate diagnoses.
Proposed Solution	
Approach	The project employs deep learning models trained on large datasets of ophthalmic images to detect and predict eye diseases.

Key Features	AI-driven early eye disease detection.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	Iris Xe Graphics
Memory	RAM specifications	16 GB
Storage	Disk space for data, models, and logs	512 SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	tensorflow
Development Environment	IDE, version control	Jupyter Notebook, Gitlab
Data		
Data	Source, size, format	Kaggle dataset, 10,000 images