Project Initialization and Planning Phase

Date	16 April 2024
Team ID	Team-738184
Project Title	Eye Disease Detection using Deep Learning
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) :

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	Develop a system using deep learning to accurately detect eye diseases.
Scope	The project will focus on creating software that can analyze images of the eye to identify diseases like glaucoma, diabetic retinopathy, and cataract and normal.
Problem Statement	
Description	We're building a smart tool that can look at pictures of the eye and tell if there's a disease present. It'll work like a trained eye doctor, but faster and with consistent accuracy.
Impact	This project could revolutionize eye healthcare by providing early detection of diseases, potentially saving people's vision and improving their quality of life.
Proposed Solution	
Approach	We'll use deep learning techniques, where the computer learns to recognize patterns in images through training on a large dataset of eye disease images. This trained model will then be able to analyze new images and identify any signs of disease.
Key Features	Accurate detection of various eye diseases,Fast analysis of eye images,User-friendly interface for easy use by healthcare professionals and Potential for early disease detection, leading to better treatment outcomes.

Resource Requirements :

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	2 x NVIDIA V100 GPUs
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	Tensorflow
Development Environment	IDE, version control	Google Colab, Git
Data		
Data	Source, size, format	Kaggle dataset, 4217 images