**Project Initialization and Planning Phase**

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| Date | 02 October 2024 |
| Team ID | 739759 |
| 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.

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| **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**

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| **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 |