Project Design Phase-I
Proposed Solution Template

Date	17 November 2023
Team ID	593035
Project Name	Deep Learning Model For Eye Disease Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	**Overview:** The prevalence of eye diseases is a significant public health concern, with early detection being crucial for effective treatment. **Specific Problem:** Limited accessibility to timely eye screenings and the shortage of skilled professionals for early detection of eye diseases.
2.	Idea / Solution description	**Concept:** Develop a Deep Learning Model for automated eye disease prediction using medical imaging. **Technical Details:** Utilize convolutional neural networks (CNNs) for feature extraction from retinal images, enabling the model to identify patterns associated with various eye diseases. **Integration:** Integrate the model into an easy-to-use platform that accepts retinal images as input and provides a prediction of potential eye diseases.
3.	Novelty / Uniqueness	**Advanced Algorithms**: Employ state-of- the-art deep learning techniques for improved accuracy and reliability in identifying diverse eye diseases. **Adaptability:** The model will continuously learn from new data, ensuring it stays up-to-date with emerging patterns and variations in eye diseases.
4.	Social Impact / Customer Satisfaction	**Early Detection:** Enable early detection of eye diseases, leading to timely intervention and improved treatment outcomes. **Accessibility:** Increase accessibility to eye screenings, particularly in underserved areas, through a user- friendly platform that allows

		remote image submission. **Educational Resources:** Provide information and resources related to eye health to enhance user awareness and proactive eye care.
5.	Business Model (Revenue Model)	**Freemium Model:** Offer basic eye screening services for free, with premium features such as detailed analysis reports, priority support, and additional educational content available through a subscription model. **Partnerships:** Collaborate with healthcare providers and institutions for bulk licensing of the platform, creating a revenue stream through institutional subscriptions.
6.	Scalability of the Solution	**Cloud Infrastructure:** Host the deep learning model on scalable cloud platforms to handle varying loads efficiently. **Data Handling:** Design the system to accommodate a growing dataset, ensuring the model's scalability as more diverse data becomes available. **Global Reach:** Plan for multi-region deployment to ensure the solution is accessible and performs well across different geographic locations.