

Ideation Phase

Define the problem statements

Date	06-05-2023
Team ID	NM2023TMID14637
Project name	ODIR: Seeing the Big Picture for Eye Health
Maximum Marks	4 Marks

Customer problem statement template:

Problem Statement:

The problem statement for ODIR (Ocular Disease Identification and Recognition) is as follows: Inadequate access to effective eye health services and limited early detection of ocular diseases are significant challenges that need to be addressed. The absence of a scalable and comprehensive solution hinders the timely identification, diagnosis, and treatment of ocular diseases, leading to preventable vision impairment and blindness. To ensure improved eye health outcomes, there is a pressing need for a holistic approach that encompasses widespread screening, accurate disease recognition, and accessible treatment options. ODIR aims to bridge this gap by implementing a scalable solution that encompasses advanced technologies, efficient resource allocation, and improved access to eye health services.

Eye health is a critical aspect of overall well-being, yet millions of individuals worldwide lack access to adequate eye care services. Many ocular diseases, if left undetected or untreated, can lead to irreversible vision loss and significantly impact an individual's quality of life. To address this issue, there is a need for an effective and scalable solution that can provide comprehensive eye health assessment, diagnosis, and treatment on a large scale.

The current challenges in eye health care include limited resources, a shortage of trained eye care professionals, geographical barriers, and the high cost associated with traditional eye screening and diagnosis methods. Moreover, the lack of awareness about ocular diseases and their early symptoms further contributes to delayed or missed diagnoses.

In this context, ODIR (Ocular Disease Identification and Recognition) aims to "see the big picture" for eye health by developing an innovative and scalable approach to identify, diagnose, and manage ocular diseases. ODIR leverages advanced technologies, such as artificial intelligence, machine learning, and telemedicine, to improve the accessibility, efficiency, and accuracy of eye health services.

However, several key challenges must be addressed to ensure the successful implementation of ODIR. These challenges include:

1. **Accuracy and Reliability:** Developing algorithms and models that can accurately identify and diagnose a wide range of ocular diseases with high precision and reliability.
2. **Accessibility and Affordability:** Ensuring that ODIR is accessible to individuals across different geographical locations, especially in underserved and remote areas, while keeping the services affordable and cost-effective.
3. **Infrastructure and Resource Limitations:** Overcoming infrastructure constraints and limited availability of eye care professionals by leveraging technology to provide remote consultations, automated screening, and diagnosis capabilities.