

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID26245
Project Name	Project - Deep learning fundus image analysis for early detection of diabetic retinopathy
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)	Given a image of left and right eye of the patient,the main aim of the project is to classify the eye status among one of the following classes 0-No DR,1-Mild,2-Moderate,3-severe,4-proliferate DR
2.	Idea / Solution description	Detecting DR is manual process done by trained clinician, so the project aim to provide a automated, suitable and sophisticated approach using image processing and pattern recognition.
3.	Novelty / Uniqueness	Classify if a patient suffers from diabetic retinopathy and use visualization method to prove better interpretation
4.	Social Impact / Customer Satisfaction	This review identifies the need for improved outcome measures to provide valid, meaningful measurement of the social and emotional impact of diabetic retinopathy and discuss potential directions
5.	Business Model (Revenue Model)	Early screening and timely treatment of the DR can reduce the burden of sight threatening retinopathy. In this project we discuss the current status of using artificial intelligence in DR and few common retinal disorders
6.	Scalability of the Solution	Image processing system significantly reduce the time required to determine diagnoses, saving effort and cost for ophthalmologists result in timely treatment of patients