

# Project Design Phase-I

## Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID26076
Project Name	Project -AI based localization and classification of skin disease with erythema
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)	The need to improve the quality of diagnosis in dermatology has increased at present times. Non-invasive screening tests that are performed only with the naked eye can cause avoidable inaccuracies in diagnosis.
2.	Idea / Solution description	CAD (Computer Aided Diagnosis) has been a viable option in dermatology by presenting a novel method to sequentially combine accurate segmentation and classification models
3.	Novelty / Uniqueness	The image is decomposed to normalize and been extracted high-level features into it. Using a neural network-based segmentation model to create a segmented map of the image, we then cluster sections of abnormal skin and pass this information to a classification model. We classify each cluster into different common skin diseases using another neural network mode.
4.	Social Impact / Customer Satisfaction	It helps us achieve sufficient accuracy rates and helps us gain knowledge of the Location of the disease. We can find the precise diagnosis for each and every disease. It eliminates trial and error.
5.	Business Model (Revenue Model)	It helps to reduce their vulnerability in harmful situations. This helps us in

		curing the disease within a single image. It is Benificatory to exploit the strengths of CAD using artificial intelligence for dermatology diagnosis
6.	Scalability of the Solution	Quantitative and qualitative attributes of scaling up and that effective scaling-up initiatives need to be adaptable, sustainable, and successful in achieving their objectives. The importance of segmentation, estimation, and evaluation throughout the scaling-up process is important for dermatology diagnosis.