

Project Design Phase-I Proposed Solution Template

Date	15 october 2022
Team ID	PNT2022TMID26285
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
•	Problem Statement (Problem to be solved)	Erythema is redness of the skin caused by injury or another inflammation-causing condition. Often presenting as a rash, erythema can be caused by environmental factors, infection, or overexposure to the sun, early detection along with proper medication can significantly improve symptoms and quality of life.
•	Idea / Solution description	In This project,we are using Artificial Intelligence(AI) domain to detect the skin disease by scanning the affected area and identifying the kind of erythema.
•	Novelty / Uniqueness	Here we use YOLO algorithm which divides the image into N grids, each having an equal dimensional region of SxS.Each of these N grids is responsible for the detection and localization of the object it contains using packages like SKYKIT,NUMPY.
•	Social Impact / Customer Satisfaction	Persistent erythema associated with may negatively impact quality of life (QoL), self-esteem, and self-confidence. We evaluated burden and health-related QoL (HRQoL) impacts of centrofacial erythema.Centrofacial erythema represents a substantial HRQoL burden, especially for those with more severe erythema.
•	Business Model (Revenue Model)	Early detection with proper medication can significantly improve symptoms and quality of life.Our model can be used in hospitals to detect erythema in early stages and cure it.
•	Scalability of the Solution	scalability in our project is achieved by using deep learning module which imports

		the advanced packages and detects the disease by scanning the image region-wise,hence our project allows alteration in accordance with various paramaters of erythema
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