

**Project Design Phase-I**  
**Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMIDxxxxxx
Project Name	Project - xxx
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)	<ul style="list-style-type: none"><li>Erythema is the skin disease associated with redness or skin rash.</li><li>It is caused due to some allergic reaction or infection. Sometimes they are chronic, infectious and may develop into skin cancer.</li><li>The diagnosis and treatment of a skin diseases like erythema takes longer time and causes financial and physical cost to the patient.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>An image processing-based approach is used to diagnose the erythema. In this method, the digital image of disease effect skin area then use image analysis to identify the type of erythema.</li><li>The approach works on the inputs of a colour image. Then resize the image to extract features using pretrained convolutional neural network. After that it classifies feature using Multiclass SVM. Finally, the results are shown to the user, including the type of disease, spread, and severity.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>It stores the data for future use</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>It is easy to access as everyone is using mobile phone now-a-days.</li><li>It is ad free as it does not cause interruption while checking their details.</li><li>It is highly secured and the data are not delivered to third persons.</li></ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"><li>It will be very useful for the customers to use this app.</li></ul>

6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>• This proposed approach is simple and fast.</li> <li>• It does not require expensive equipment's other than a mobile phone.</li> <li>• It can be used by dermatologist (skin specialist doctor) when they found difficulty in diagnosing the skin disease and may require expensive laboratory tests to correctly identify the type and stage of the skin disease.</li> </ul>
----	-----------------------------	---