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

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| Date | 20 September 2022 |
| Team ID | PNT2022TMID03793 |
| 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) | ➢ Now a day's people are suffering from skin diseases, More than 125 million people suffering from Psoriasis also skin cancer rate is rapidly increasing over the last few decades especially Melanoma is most diversifying skin cancer.<br>➢ If skin diseases are not treated at an earlier stage, then it may lead to complications in the body including spreading of the infection from one individual to the other.<br>➢ The skin diseases can be prevented by investigating the infected region at an early stage.<br>➢ The characteristic of the skin images is diversified so that it is a challenging job to devise an efficient and robust algorithm for automatic detection of skin disease and its severity.<br>➢ Skin tone and skin colour play an important role in skin disease detection. Colour and coarseness of skin are visually different.<br>➢ Automatic processing of such images for skin analysis requires quantitative discriminator to differentiate the diseases |
| 2. | Idea / Solution description | ➢ To overcome the above problem we are building a model which is used for the prevention and early detection of skin cancer, psoriasis.<br>➢ Basically, skin disease diagnosis depends on the different characteristics |

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| | | like colour, shape, texture etc. Here the person can capture the images of skin and then the image will be sent the trained model.<br>➢ The model analyses the image and detect whether the person is having skin disease or not |
| 3. | Novelty / Uniqueness | ➢ The novelty proposed in this approach is we have collected the dataset on our own.<br>➢ We have also annotated the images by ourselves. |
| 4. | Social Impact / Customer Satisfaction | ➢ The model which will be built by us is very useful for the users to find the type of disease quickly and get the correct the medicine as soon as possible.<br>➢ We ensure to the users that our model diagnoses the diseases well. |
| 5. | Business Model (Revenue Model) | ➢ Health Care Sector(Hospitals).<br>➢ Can generate revenue through direct customers.<br>➢ Can collaborate with health care sector and generate revenue from their customers.<br>➢ Contributing the corporate social responsibility by providing better solutions to the healthcare and to patients. |
| 6. | Scalability of the Solution | ➢ To detect how much area is affected by the skin disease with accuracy.<br>➢ Classification of Skin disease will help doctors to diagnose the disease effectively. |