

Project Design Phase-I Solution Architecture

Date	27 October 2023
Team ID	Team-592681
Project Name	Early Diagnosis Of Diseases Using Image processing Of Human Nails
Maximum Marks	4 Marks

Solution Architecture:

Our system optimizes the early disease diagnosis process through CNNs for real-time image-based classification. It enhances diagnostic accuracy and improves healthcare management while empowering individuals to take control of their well-being. The architecture consists of the following key components:

- 1. Data Collection:** Provided nail images are used for analysis.
- 2. Image Preprocessing:** Uploaded images undergo preprocessing to enhance quality and consistency.
- 3. Model Building:** The system leverages the VGG16 model and transfer learning techniques to extract features from nail images.
- 4. Disease Classification:** Extracted features are used to classify nail images into various disease categories.
- 5. Recommendations:** Based on the classification results, personalized recommendations and next steps are provided to users for proactive healthcare management.

Solution Architecture Diagram:

