**Project Design Phase-I**

**Solution Architecture**

| Date | 27 October 2023 |
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| 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.

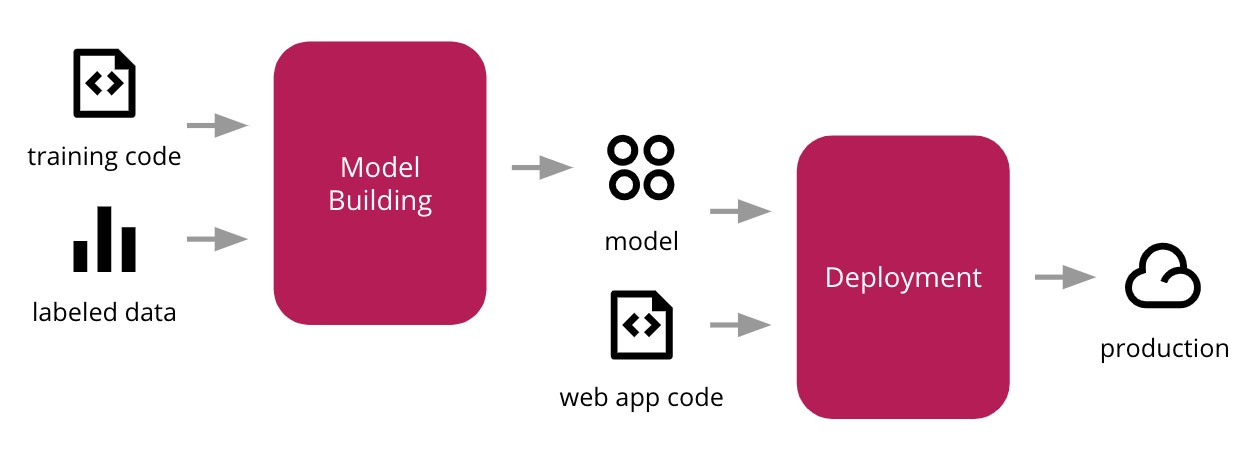
2. **Image Preprocessing**: Uploaded images undergo preprocessing to enhance quality and consistency.

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:**

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