**Project Design Phase-I Solution
Architecture**

Date	04 November 2022
Team ID	PNT2022TMID28896
Project Name	AI-based localization and classification of skin disease with erythema
Maximum Marks	4 Marks

Solution Architecture:

- The Skin Disease Image Dataset is taken from Google and is processed and annotated using Robotflow tool.

- This processes dataset is splitted into **Training** (70%), **Validation** (20%) and **Testing** (10%) datasets.

- This processed dataset is trained using **Yolov** and **OpenCV** python libraries.

- An Artificial Intelligence model is built after training for considerable number of epochs which is shown from the training phase diagram

- A Full Stack **Web App** is build using **React** and **Flask** with cloud **Database** provided by **IBM.**

- The skin diseased image uploaded by the user from the frontend is fed into the AI model built which classifies what type of disease and localizes the areas affected by. This process takes place at the backend

- This output result is finally displayed to the user

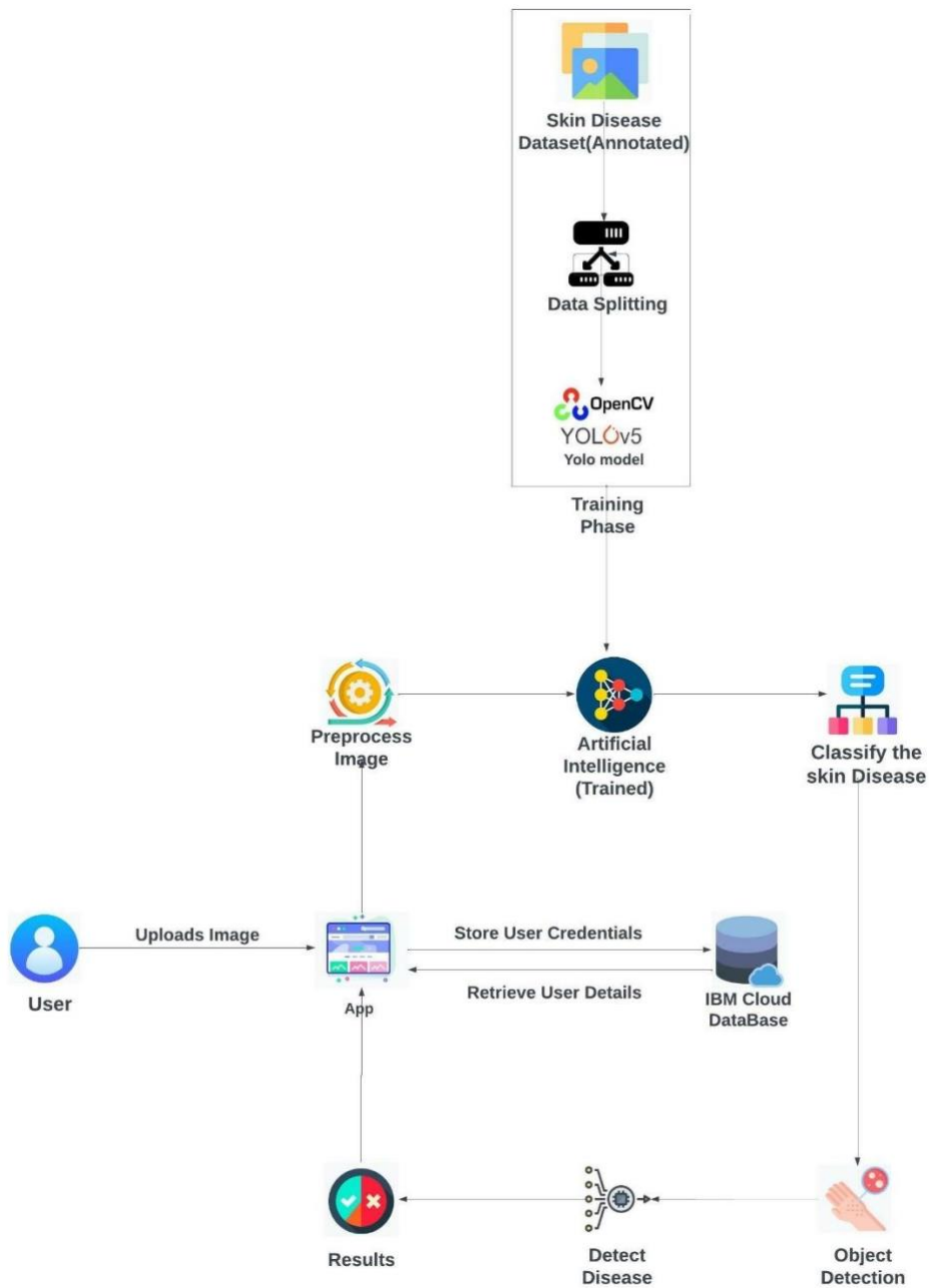**Example - Solution Architecture Diagram:**

Figure 1: Architecture and data flow of the skin disease prediction application