

Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID00624
Project Name	AI-based localization and classification of skin disease with erythema
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below.

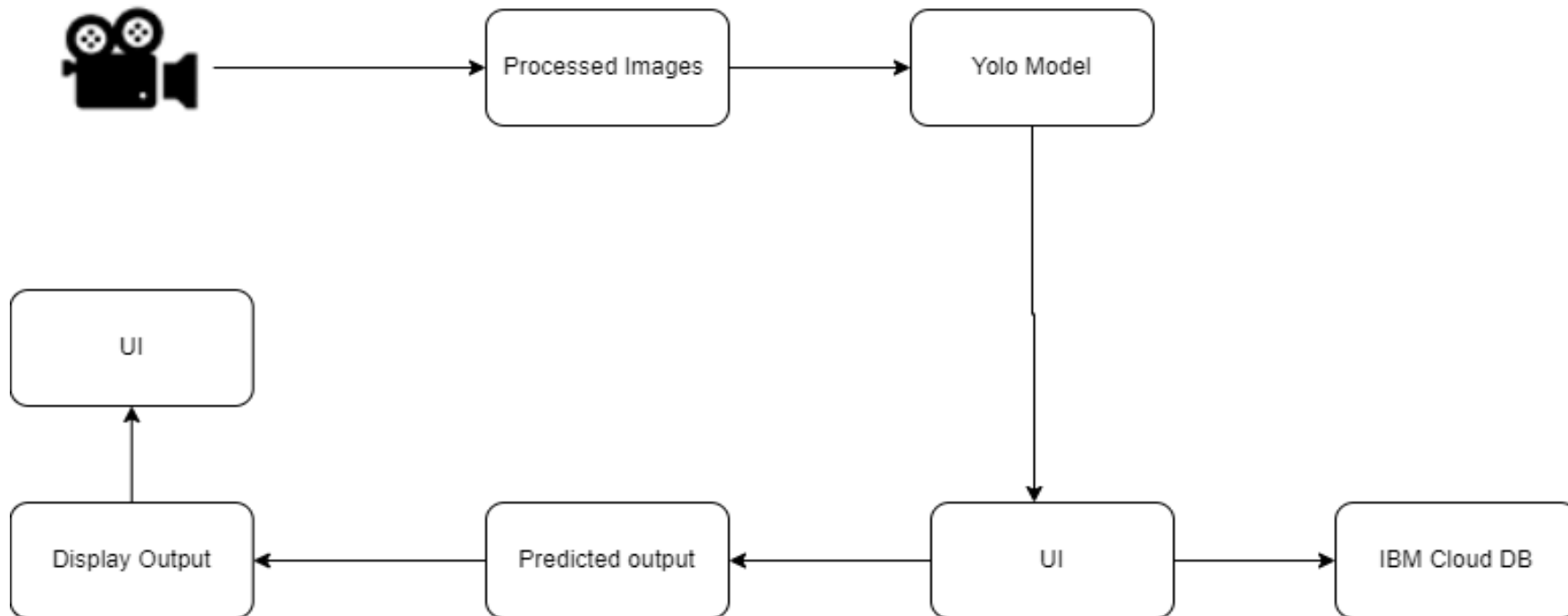


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / React JS etc.
2.	Application Logic-1	The data of the users will be stored in the data base.	MySQL, NoSQL.
3.	Application Logic-2	The Machine learning model should be trained.	CNN
4.	Application Logic-3	The CNN Algorithm will classify the uploaded images of the user.	Python
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	Local Filesystem
8.	Machine Learning Model	Training and Testing	Convolution Neural Network

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Keras designed to enable fast experimentation with deep neural networks, it focuses on being user-friendly, modular, and extensible	Keras
2.	Security Implementations	Encryption is a mathematical tool that allows for encryption of data, ensuring privacy while at the same time, allowing computations to be performed on the encrypted data.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Performance will be good even with the higher user traffic	Django or Flask

S.No	Characteristics	Description	Technology
4.	Availability	With good system all users can access it.	Django or Flask
5.	Performance	With greater accuracy, the performance is high	NeoLoad