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

Date	03 October 2022	
Team ID	PNT2022TMID26285	
Project Name	Al-based localisation and classification of skin	
	with Erythema	
Maximum Marks	4 Marks	

Technical Architecture:

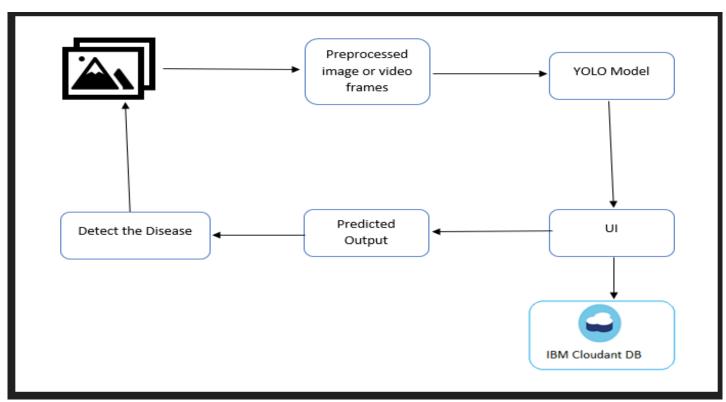


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts through the Web UI created	HTML, CSS, Python
2.	Application Logic-1	This is the works environment where we implement the methodology and execute the model	Pycharm/Spyder IDE
3.	Application Logic-2	It is the Microsoft Visual Object Tagging Tool used to create an image dataset	VoTT
4.	Application Logic-3	It is the structure of the project used to build our model	YOLO Structure
5.	Cloud Database	Database Service on Cloud	IBM Cloudant
6.	File Storage	File storage requirements	IBM Block Storage
7.	Machine Learning Model	The purpose of our model is to localize erythema skin disease and classify its type	Image classification model
8.	Infrastructure (Cloud)	Application Deployment on Cloud	Cloud Foundary

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Anaconda,Spyder/Pycharm,VoTT,YOLO	Programming
2.	Security Implementations	Implementation of Firewalls	Al Firewall
3.	Scalable Architecture	Scalability of architecture is Microservices	Cloud
4.	Availability	Availability of application is based on cloud allocation	Cloud
5.	Performance	Design consideration for the performance of the application: • number of requests is based on the server strength • Cache memory of the local server is used to store data	System memory