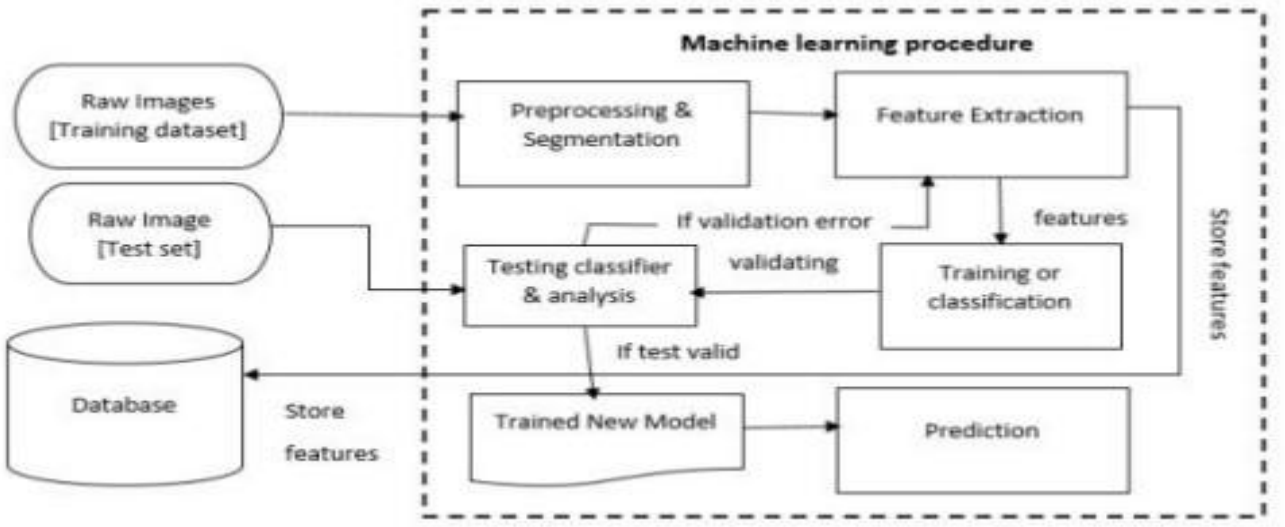
Project Design Phase-II Technology Stack (Architecture & Stack)

Date	22 October 2022
Team ID	PNT2022TMID17885
Project Name	AI based localization and classification for skin disease with erythema
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Tensorflow
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	web authn

3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Kubernetes

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user can interact with informative webUI.Additionally a chatbot for basic assistance on how to use the portal will be present.	Python flask
2.	Application Logic-1	Authentication	JavaScript / Python
3.	Application Logic-2	chatbot	Python Rasa
4.	Application Logic-3	ML Algorithm	Python,Tensorflow
5.	Database	Data Type, Configurations etc.	MySQL, /MongoDB
6.	Cloud Database	Database Service on Cloud	IBM Cloudant
7.	File Storage	File storage requirements	Local Filesystem
8.	External API-1	logging in by many ways	Gmail login , Facebook login API
9.	Machine Learning Model	Skin disease detection	ML model(yolo)
10.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	Versel/Netlify

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology

4.	Availability	Traefic is a web server that can be used for load balancing etc,	Traefic,Docker
5.	Performance	Request and response time delay, number of request, system/tech crashes	postman,sentry.io