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

Date	18 October 2022	
Team ID	PNT2022TMID01254	
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 and the information as per the table 1 & table 2

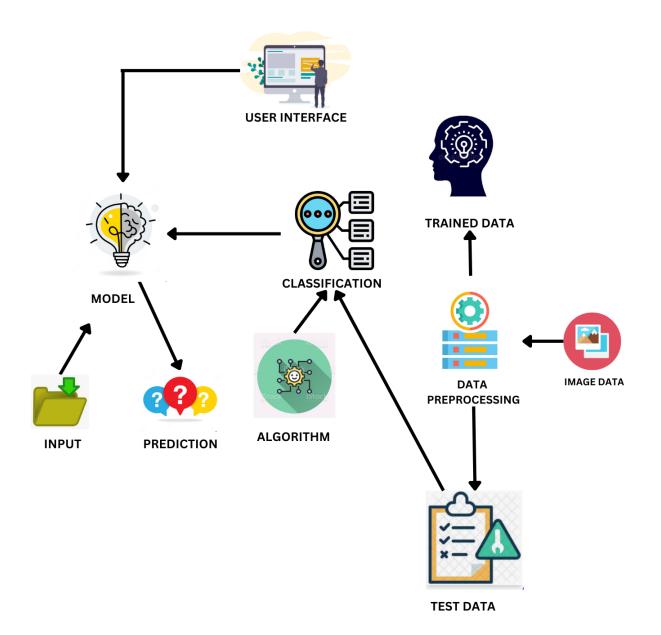


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application to upload image	HTML, CSS, JavaScript
2.	Model analysis	After that classification is showcased on the UI	CNN Model
3.	Data collection	Create the Dataset	Python, Keras, numpy
4.	Data Preprocessing-1	Import the Library	Python, Keras, numpy
5.	Data Preprocessing-2	Configure the class.	Python, Keras, numpy
6.	Data Preprocessing-3	Apply Image Data Generator functionality to Trainset and Testset	Python, Keras, numpy
7.	Model Building-1	Import the model building libraries and initialise the model	Python, Keras, numpy
8.	Model Building-2	Adding layers and configure	Python, Keras, numpy
9.	Model Building-3	Training and testing the model	Python, Keras, numpy
10.	Application Building	Building python code	HTML,Python
11.	Train the model on IBM	CNN development	IBM Watson

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open source software is by which the source code or base code is usually available for modification	Flask (Python), Anaconda Navigator
2.	Security Implementations	The WAF is able to protect against attacks like cross site forgery, cross site scripting and SQL injection	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Though many users used, doesn't affect the performance	Response Time,Throughput,CPU and Network usage etc
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	HTML,CSS,JavaScript,Python
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	HTML,CSS,JavaScript,Python