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

Date	03 October 2022
Team ID	PNT2022TMID42733
Project Name	Project - A Gesture-Based tool for Sterile browsing of radiology images.
Maximum Marks	4 Marks

Technical Architecture:

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

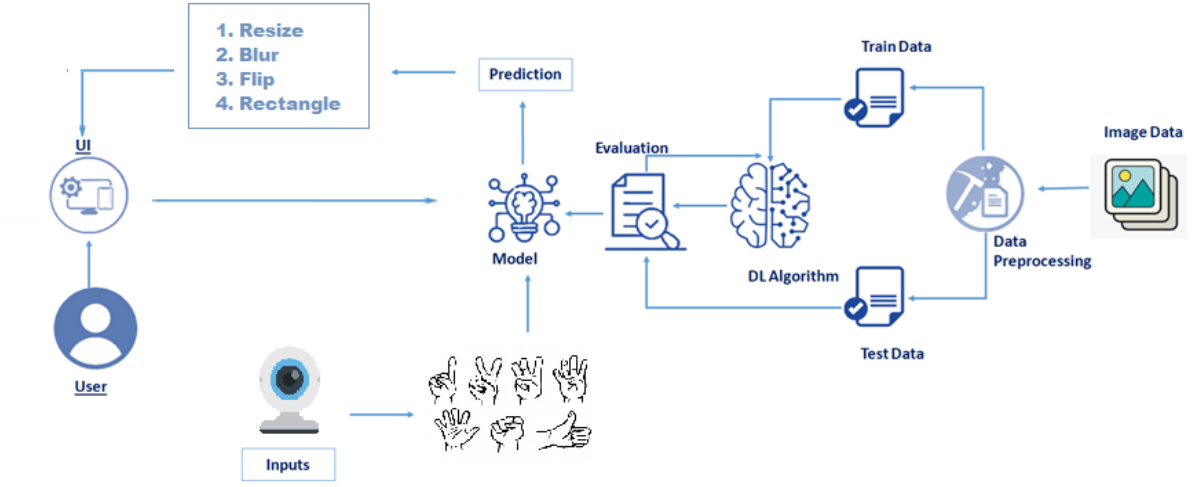

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with the application Web UI and Mobile App.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Monitoring the User's hand gestures	This product understand the hand gestures of the user .	Python
3.	Change the hand gestix into machine understandable language.	Through UI it would be processed	Python
4.	Finding results based upon hand gestix	Through deep learning algorithm ,the gestures are evaluated.	Python
5.	Database	In the web application, admins and user can view the total process and outputs.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Stores the tested data	Cloud storage
8.	External API-1	The parameters such as size of the brain ,what type of disease in that etc.,	IBM cloud
9.	External API-2	Person or customers identity to store their details in a particular file.	Aadhar API
10.	Machine Learning Model	user interface ,interfaces the hand gestures and expand the sensing according to the gestures.	Object Recognition Model
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry,.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Google Collaboratary,Jupyter Notebook,Google drive,Python Flask	Python,HTML,CSS
2.	Security Implementations	Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IoT Platform.	SHA-256, Encryptions, IAM Controls, OWASP
3.	Scalable Architecture	3 – tier architecture will be used,The client and server	Python
4.	Availability	If any error occurs in the machine the admin wil get notified and repair from their own place	IBM cloud
5.	Performance	It gives better performance,while comparing other techniques.	Deep Learning Algorithm