

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

Date	03 October 2022
Team ID	PNT2022TMID39288
Project Name	A Gesture-based Tool for Sterile Browsing of Radiology Images
Maximum Marks	4 Marks

Technical Architecture:

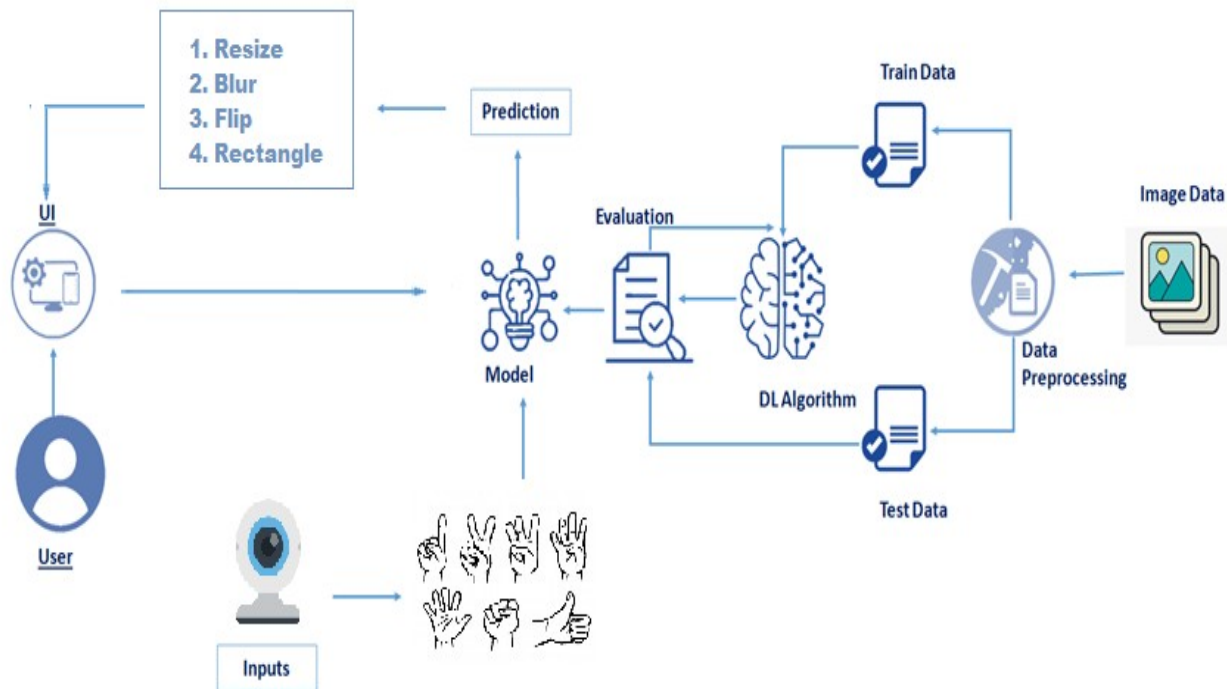


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web user interface.	HTML, CSS, JavaScript .
2.	Data set image	Collect images from internet or create the hand gesture dataset by taking picture.	hand gesture images
3.	Data image pre-processing	Import the file you already have in python.	python
4.	Image Model building	Using CNN build the mode from imported dataset images	IBM Watson Assistant
5.	Application building	Create the website for the user interface.	HTML, CSS, JavaScript
6.	File storage	Store the program files and datasets files in a particular file.	Local host file storage system
7.	Deep learning	Used to analyse visual imagery, image processing, video capture	CNN, OpenCV ,tensorflow.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	User interface and pre-processing	Visual studio code or sublime text editor, anaconda navigator.
2.	Security Implementations	It identify the gesture action only when the hand is in front of the camera.	Open cv
3.	Scalable Architecture	It can be used in any platform like android ,linux and windows using web	HTML and open cv
4.	Availability	It is used to reduce the possibility of spreading infections to the patients.	Artificial intelligence
5.	Performance	Design consideration for the perform of hand gesture actions.	CNN model

