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

Date	15 October 2022
Team ID	PNT2022TMID38774
Project Name	Project - A gesture-based tool for sterile browsing of radiology images
Maximum Marks	4 Marks

Technical Architecture:

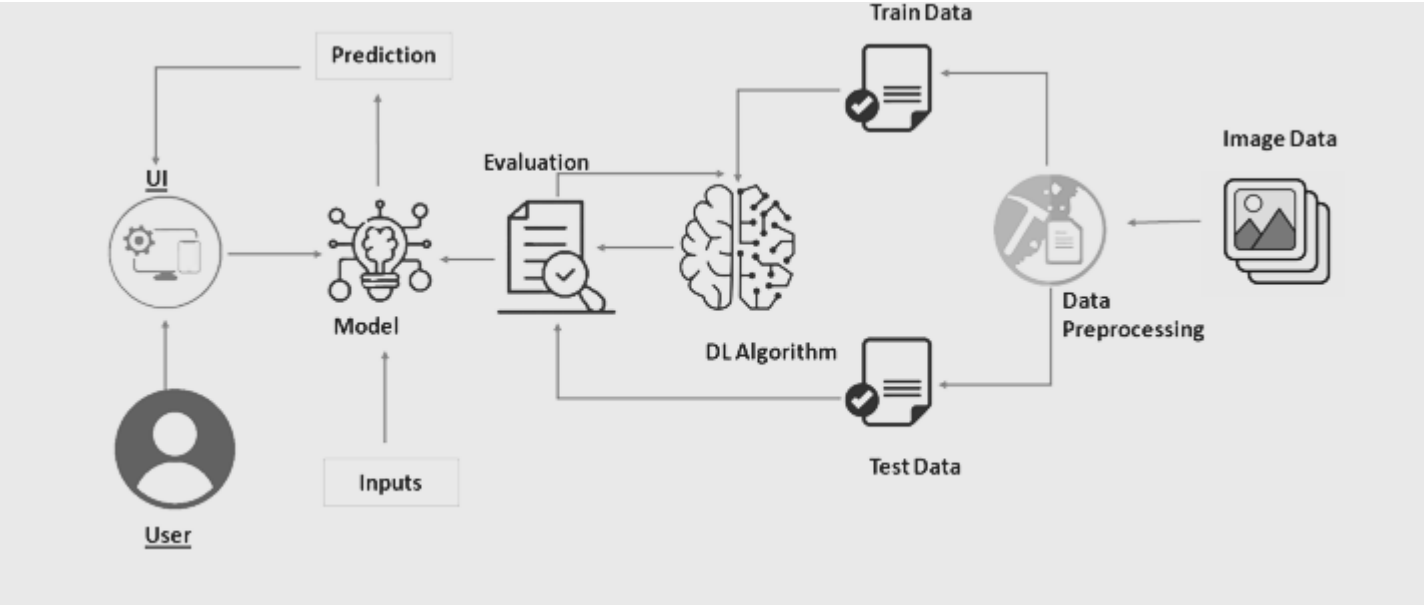

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI Application	HTML, CSS, JavaScript
2.	Dataset	Collect or create the hand gesture dataset	Hand Gesture Images
3.	Data pre-processing	Import the library files	Python
4.	Model building	Build the CNN model	Python-IBM Watson Studio
5.	Application building	Create HTML file	HTML, CSS, JavaScript
6.	File storage	Store the code files and datasets	Local Filesystem
7.	Deep learning	Used to analyse visual imagery, image processing, video capture	CNN, OpenCV

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Application development, data pre-processing.	Visual studio code, anaconda navigator
2.	Security Implementations	It identifies the gesture only when the hand is in front of the camera.	OpenCV
3.	Scalable Architecture	It can be used in any environment and is able to identify the gesture	OpenCV
4.	Availability	It is used to reduce the possibility of spreading infections	AI
5.	Performance	Rapid response to the gesture.	CNN