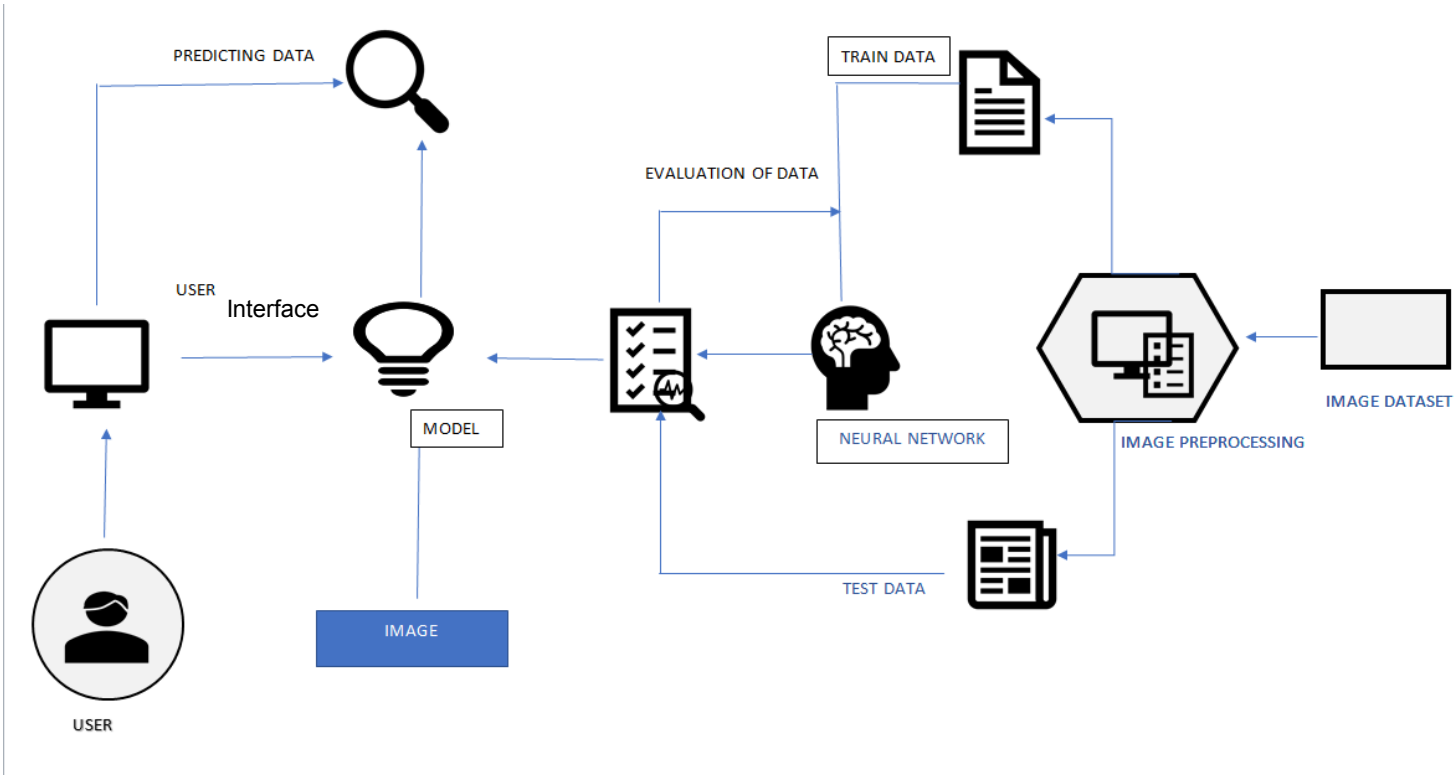
Project Design Phase-II Technology Stack
(Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID14463
Project Name	Real-time communication system powered by AI forspecially abled
Maximum Marks	4 Marks



S.No	Component	Description	Technology
1.	User	Disabled person unable to communicate with normal people.	AI technology
2.	USER INTERFACE	Flask is a micro web framework written in Python.It does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components.	Python
3.	Models	Support Vector Machine (SVM) is subsequently applied to classify our gesture image dataset.	Machine learning

4.	Image	Hand gestures images are fed into image processing system and converted into speech.	ANN, CNN
5.	Image prediction	The images which are captured are observed and the gestures are predicted	AI and neural network
6.	Evaluated data	The accurate result for the image processed is predicted.	AI technology
7.	Neural network	ANNs are composed of multiple nodes, which imitate biological neurons of human brain. The nodes can take input data and perform simple operations on the data.The output at each node is called its activation or node value.	AI technology
8.	Test data	Samples used for comparison and formulating the result.	Cloud database
9.	Train data	The output from theprocessed input	Neural network
10.	Image pre processing	Improvement of the image data that suppresses unwilling distortions or enhances some image features important for further processing.	AI technology
11.	Image dataset	An image dataset includes digital images curated for testing, training,and evaluating the performance of machine learning and artificial intelligence (AI) algorithms, commonly computer vision algorithms.	Cloud database