PROJECT DESIGN PHASE – II

TECHNOLOGY ARCHITECTURE

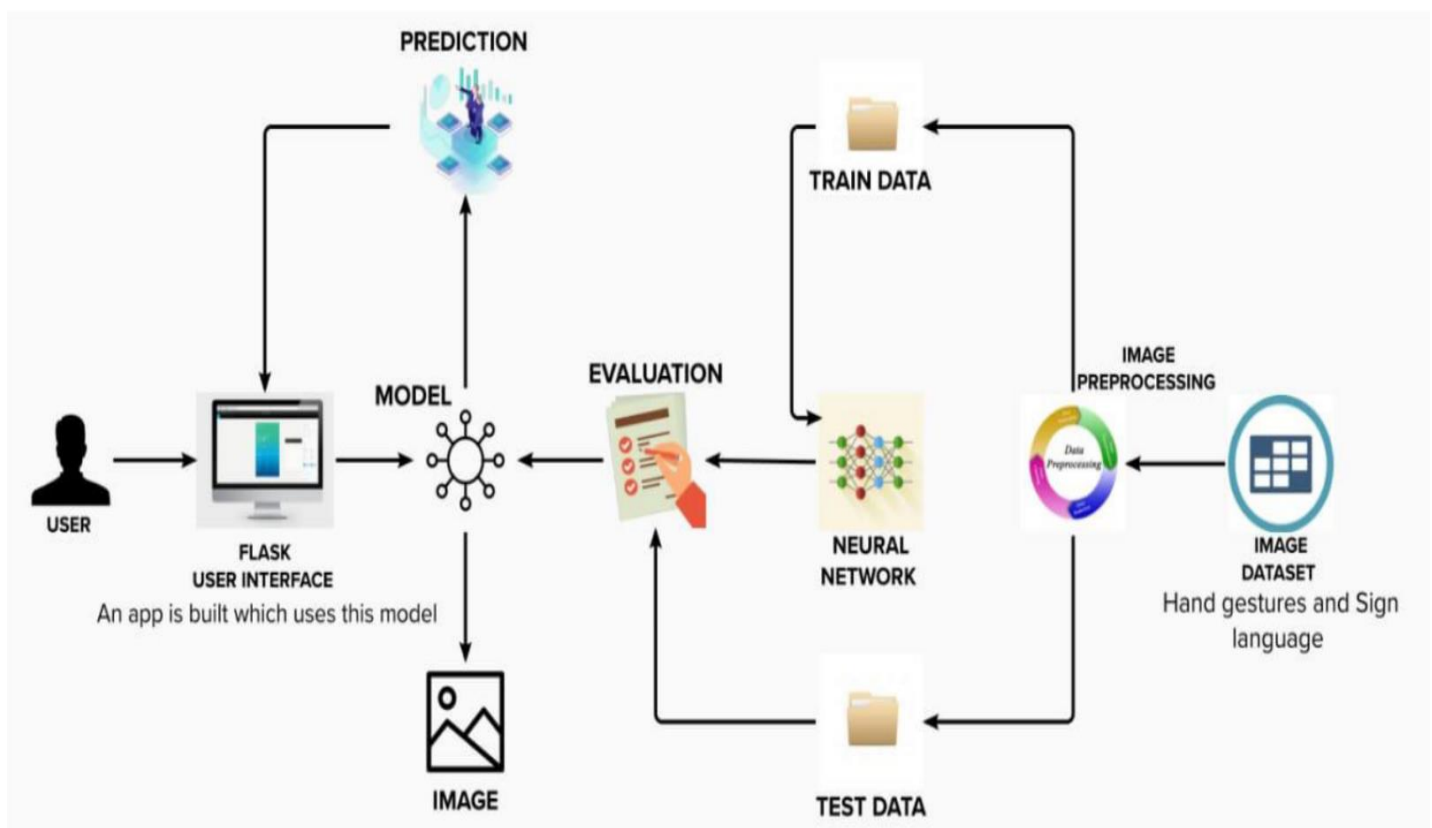| DATE	18- OCTOBER -2022
TEAM ID	PNT2022TMID39801
PROJECT NAME	Real – Time Communication System powered by AI for Specially Abled
PROJECT NAME	4 marks

TECHNOLOGY ARCHITECTURE:

Table -1: COMPONENTS & TECHNOLOGIES:-

S.NO:	COMPONENTS	DESCRIPTION	TECHNOLOGY
1	User Interface	The user interface is the point of human computer interaction & communication in a device.	Python flask
2	Flash UI	Flash User Interface components let you interact with the users that use your site & gather information	It can be executed while using the cloud
3	Models	Support Vector Machine (SVM) is subsequently applied to classify our gesture image dataset	Machine Learning
4	Image prediction	Gesture can be completely observable & viewing a gesture from another perspective makes the prediction	Artificial Neural Network (ANN) Convolutional Neural Network (CNN) Open CV
5	Image	Image processing is used to made the image into signs by the neural network	Artificial Neural Network (ANN) Convolutional Neural Network (CNN) Open CV
6	speech	Speech translates the voice into image & sensitive neural play	Artificial Intelligence & Machine Learning methods like Deep Learning & Neural Networks

7	Evaluate Data	Aims to estimate the generalisation accuracy of a model on future data	Natural Language Processing (NLP)
8	Unstructured Data	Unstructured data is a conglomeration of many varied types of data that are stored in their native formats	Natural Language Processing (NLP)
9	Structured Data	Typically categorised as quantitative data is highly organised & easily decipherable by machine learning algorithm	Machine Learning & AI tools
10	Machine Learning Model	Based on Training	Object recognition model etc.,
11	Dataset	First dataset of this system was used as a dataset of 24 static signs of Panamanian Manual Alphabet	AI technology

TABLE -2: APPLICATION CHARACTERISTICS:-

S.NO:	CHARACTEISTICS	DESCRIPTION	TECHNOLOGY
1	Open – Source Frameworks	Robots & other tools provide home – based care & other assistance, allowing people with disabilities to live independently	Artificial Intelligence like Robot & software Systems
2	Security Implementations	Set the inclusion & exclusion criteria, report the results in the survey	Artificial Intelligence

3	Availability	Justify the availability of applications	Conferencing Technology
4	Performance	Enables people with disabilities to step into a world where their difficulties are understood & taken into account	Natural Language Processing (NLP)