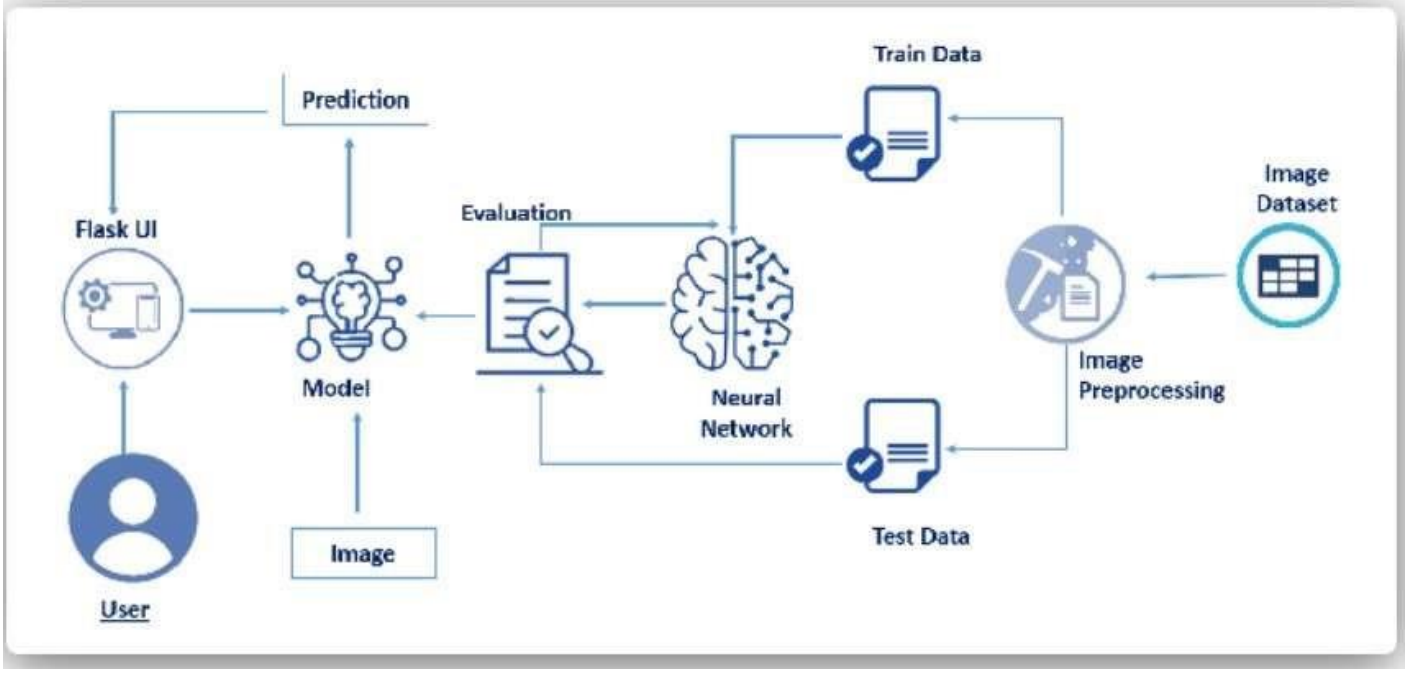
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	10 October 2022
Team ID	PNT2022TMID29700
Project Name	Real-time communication system powered by AI for specially abled
Maximum Marks	4 Marks



S.No	Component	Description	Technology
1.	User	Deaf-mute person unable to communicate with others leading to dependency and unsocial behaviour.	AI technology
2.	Flask UI	Flask is a small and lightweight Python web framework that provides useful tools and features that make creating web applications in Python easier.	Python

3.	Models	Support Vector Machine (SVM) is subsequently applied to classify our gesture image dataset.	Machine learning
4.	Image	Images of various hand gestures are fed to be converted into speech through image processing system	ANN, CNN, Open CV
5.	Image prediction	Images fed are observed and predicted for the gestures	AI and neural network
6.	Evaluated data	Aims to determine the accurate result for the image processed and predicted.	AI technology
7.	Neural network	A neural network is a series of algorithms that endeavors to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates.	AI technology
8.	Test data	Samples used for comparison and formulating the result.	Cloud database
9.	Train data	Samples as the output from the processed 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