

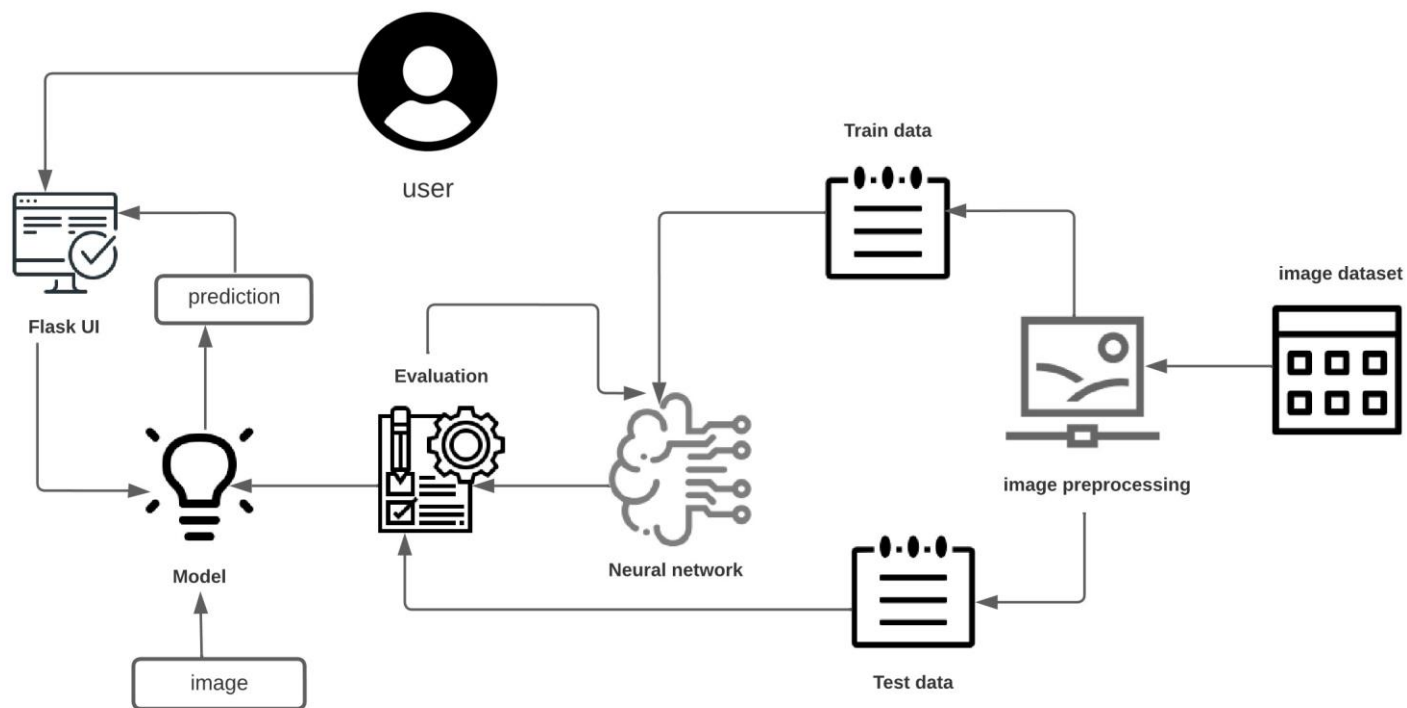
**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Date	03 October 2022
Team ID	PNT2022TMID07105
Project Name	Project - Real-Time communication system powered by AI for specially abled
Maximum Marks	4 Marks

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

**Example: Real-Time communication system powered by AI for specially abled**



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application i.e, Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js/ flask UI etc.
2.	Application Logic-1	Captures the sign Camera detects the sign	Face and hand detector is used.
3.	Application Logic-2	Image is captured clearly	Gray scale image .

4.	Application Logic-3	Convert text to speech	Speech assistant is implemented.
5.	Database	Data Type- Binary large object is used, Configurations-mysql/my.cnf, etc.	MySQL.
6.	File Storage	File storage requirements – jpeg,png,psd	Local Filesystem
.	Machine Learning Model	Algorithm Is fed to the system	Object Recognition Model, etc.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Image capturing, speech assistant,sign language detection	Pipe framework
2.	Scalable Architecture	scalability of architecture (3 – tier depth-many layers,width-neurons,resolution-learn complex features	CNN(Convolution Neural Network)
4.	Availability	Hand signs,text,images	CNN,speech assistant,machine learning