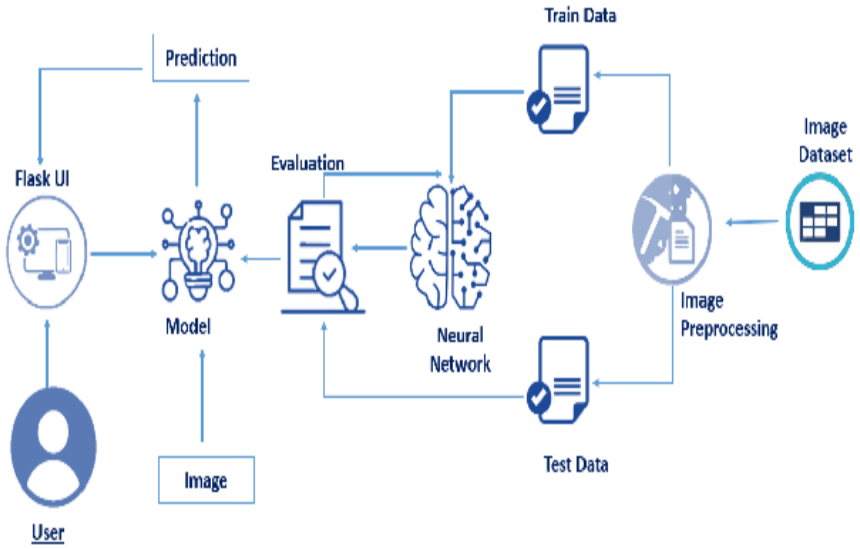
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	06 November 2022
Team ID	PNT2022TMID42258
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



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can interact using Web UI and Mobile Application	HTML
2.	Application Logic-1	Get the image dataset and pre-process the images which will be used for building the model	Python
3.	Application Logic-2	Building and testing the model	IBM Watson STT service
4.	Application Logic-3	Building the application	Flask
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	, use of firewalls	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
2.	Scalable Architecture	It can handle business growth	Web server tuning,Operating system tuning
3.	Availability	Available to everyone	Open source framework
4.	Performance	Without delay outputs can be viewed	Deep Neural network