

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

Date	13 November 2022
Team I D	PNT2022TM D31200
Project Name	Real time communication system powered by AI for specially disabled
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

Example: Real time communication system powered by AI for specially disabled

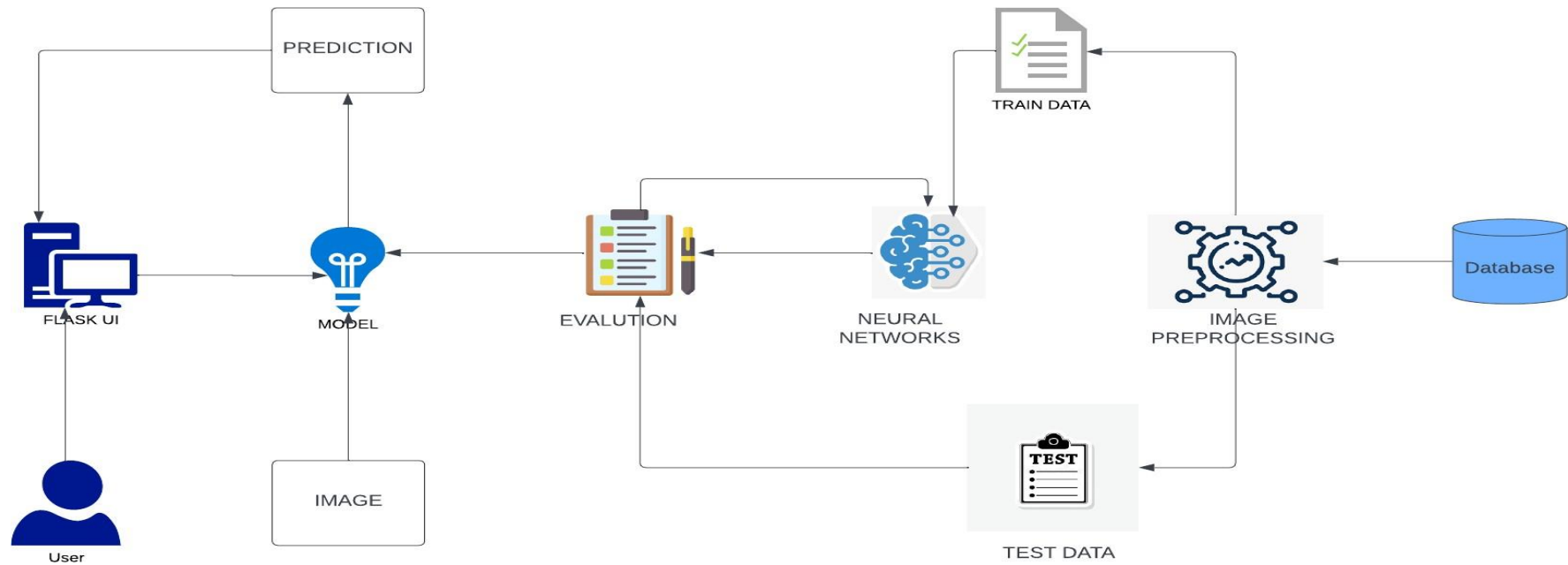


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interface is the point of human computer interaction and communication in device	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Converting speech into sign language	Java /Python
3.	Application Logic-2	Converting to signlanguage to speech	IBM Watson STT service
4.	Application Logic-3	Converting to speech to readable content	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, Rational database etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Methodology used to organize and store data on computer hard drive	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API	Defines communication between normal people and deaf people	IBM Weather API ,etc.
9.	Machine Learning Model	Training	Object Recognition Model, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture – (3 tier, Micro-services)	Devops
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Conferencing technology
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	NLP