GOVERNMENT COLLEGE OF TECHNOLOGY, COIMBATORE

Computer Science and Engineering

IBM
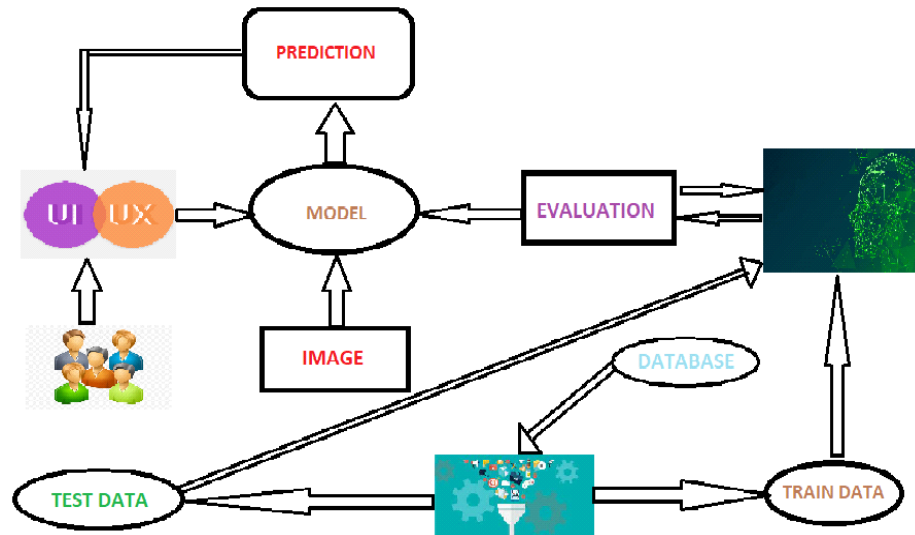### NALAIYA THIRAN
Project Design Phase-II Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID06858
Project Name	Project – Realtime Communication System Powered by AI for speciallyAbled.
Maximum Marks	4 Marks

Technical Architecture:

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

IMAGE

PROCESSING

Table 1:

Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interface is where the human and computer interaction takes place.	HTML, CSS, JavaScript, Vue Js , Node Js, React Js, Bootstrap. .
2.	Application Logic-1	Conversion of speech into signlanguage	Java / Python
3.	Application Logic-2	Conversion of sign language intospeech	IBM Watson STT service
4.	Application Logic-3	Conversion of speech to	IBM Watson Assistant

S.No			
		Readablecontent	
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudantetc.
7.	File Storage	Method used to organize andstore data on Hard drive	IBM Block Storage or Other Storage Service orLocal Filesystem
8.	External API	Defines the communicationBetween normal 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	It is a open source which enables rapid developmentof secure and maintainable websites.	Bootstrap, Spring boot, React JS etc..
2.	Security Implementations	Technical tools and techniques that are used toimplement security services	SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Supports High Workloadswithout any Fundamental changes	Devops
4.	Availability	Check Whether the application is workingproperly.	Conferencing Technology