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

Date	11 November 2022	
Team ID	PNT2022TMID45510	
Project Name	Real Time Communication System Powered ByAI	
	For Specially Abled.	
Maximum Marks	4 Marks	

Technical Architecture:

The architectural diagram of the model is as below and the Technology used is shown in Table1

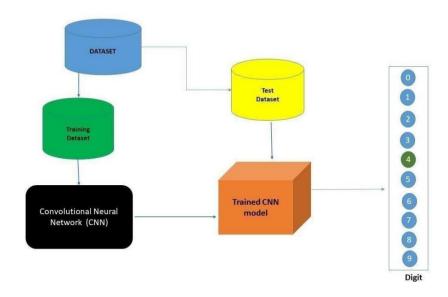


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g.,MobileApplication	HTML, CSS, Python Script/ Flask
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on AI in cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage or Other StorageService or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	Internet of Things Model	Purpose of AI Model is for integrating the sensors with a user interface.	IBM AI Platform
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model
11.	Infrastructure (Server / AI)	Application Deployment on Local System / AI LocalServer Configuration AI Server Configuration	Local, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Deep learning frameworks can help you upload dataand train a deep learning model that would lead to accurate and intuitive predictive analysis.	Tensorflow, PyTorch
2.	Security Implementations	The system should automatically be able to authenticate all users with their unique usernameand password	NA
3.	Scalable Architecture	The system should be able to handle 10000 usersaccessing the site at the same time	NA
4.	Availability	Information is restricted to each users limitedaccess	NA
5.	Performance	Should reduce the delay in information whenhundreds of requests are given	Google Co-Lab Pro/Require high endsystem.