

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

Date	25 October 2022
Team ID	PNT2022TMID50185
Project Name	AI-based discourse for Banking Industry
Maximum Marks	4 Marks

Technical Architecture:

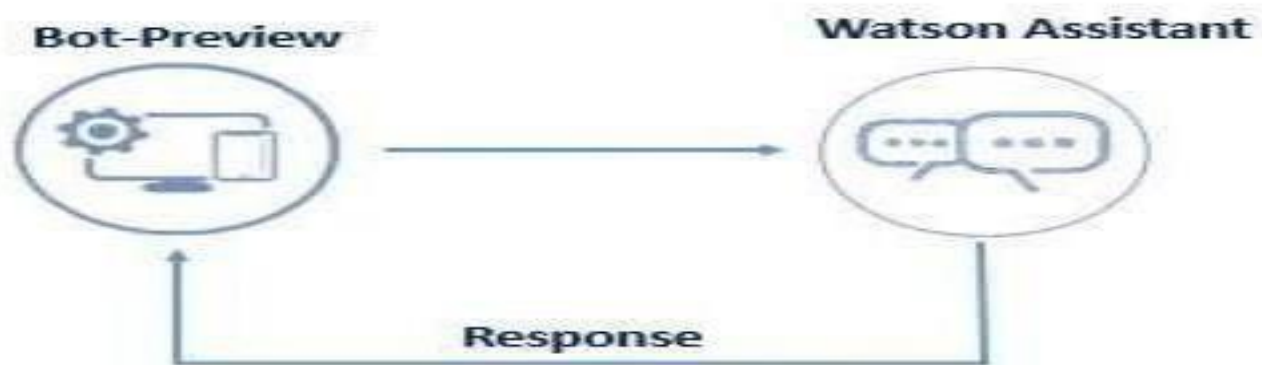


Table-1:Components& Technologies:

S.No	Component	Description	Technology
1.	UserInterface	Howuserinteractswithapplication e.g.Web UI, MobileApp, Chatbotetc.	HTML,CSS, JavaScript/AngularJs/ ReactJsetc.
2.	ApplicationLogic-1	Logicforaprocessin theapplication	Python
3.	ApplicationLogic-2	Logicforaprocessin theapplication	IBMWatsonSTTservice
4.	ApplicationLogic-3	Logicforaprocessin theapplication	IBMWatsonAssistant
5.	Database	DataType, Configurationsetc.	MySQL,NoSQL,etc.
6.	CloudDatabase	DatabaseServiceonCloud	IBMDB2, IBMCloudantetc.
7.	File Storage	Filestoragerequirements	IBMBlock StorageorOtherStorage ServiceorLocalFilesystem
8.	ExternalAPI-1	PurposeofExternalAPIusedin theapplication	IBMWeather API,etc.
9.	ExternalAPI-2	PurposeofExternalAPIusedin theapplication	AadharAPI,etc.
10.	MachineLearningModel	Purposeof MachineLearningModel	ObjectRecognition Model,etc.
11.	Infrastructure(Server/Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: CloudServer Configuration:	Local,CloudFoundry,Kubernetes,etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Anaconda Navigator, Tensor flow, Keras, Flask
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Response time, Throughput, CPU and network usages, etc.
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	All kind of users.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Watson Assistant is used to build the chatbot.