

Project Design Phase-2

Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID34317
Project Name	Personal Assistant for Senior Who Are Self Reliant
Maximum Marks	4 Marks

Technical Architecture:

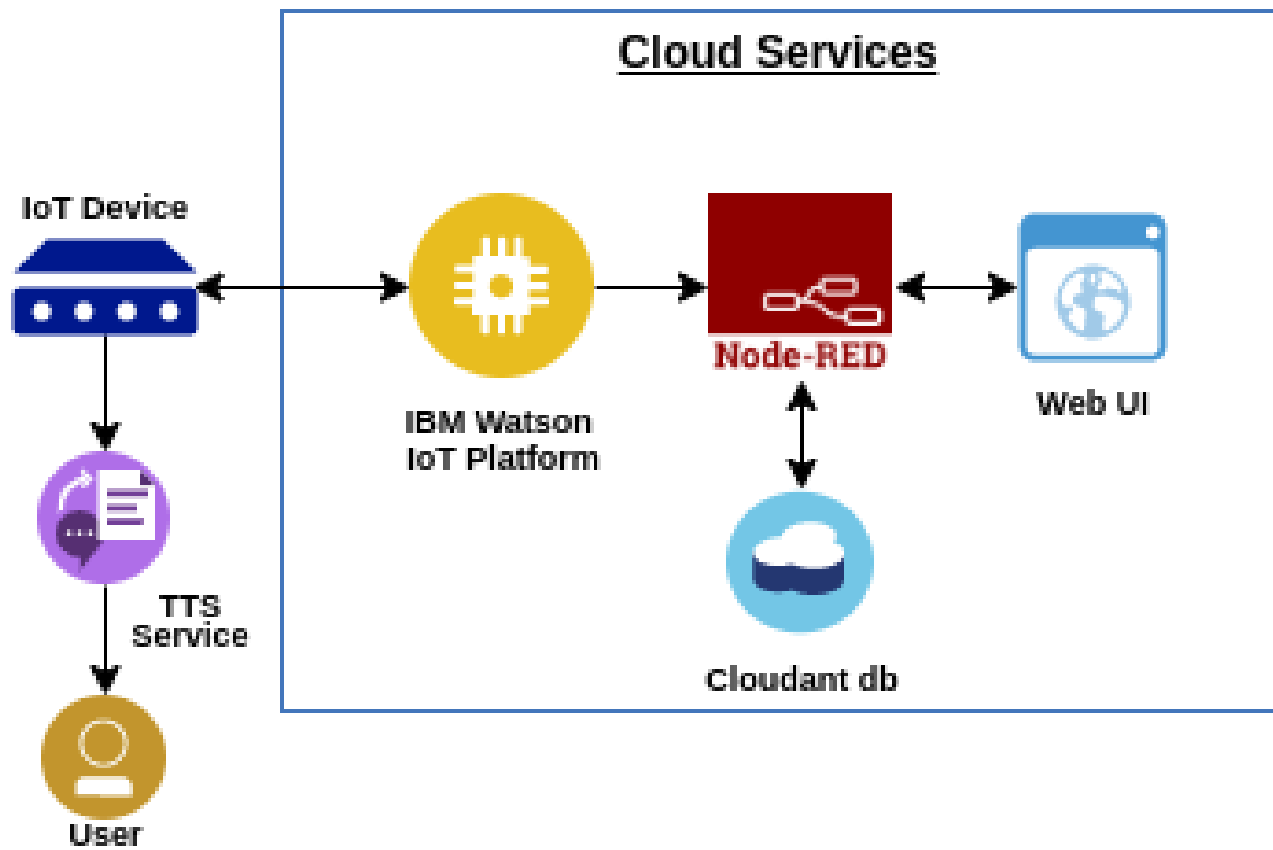


Table-1: Components & Technologies:

S.no	Component	Description	Technology
1.	User Interface	How user Interacts with application	JavaScript,HTML,CSS etc
2.	Application Logic-1	Logic for a Process in the application	Python
3.	Application Logic-2	Logic for a Process in the application	TTS service
4.	Application Logic-3	Logic for a Process in the application	IBM Watson Platform
5.	Database	Data Type, Configurations etc.	Node-RED etc.
6.	Cloud Database	Database Service on Cloud	IBM DB, IBM Cloudant etc.
7.	File Storage	File storage Requirements	IBM Block Storage or Other Storage Service
8.	External API-1	Purpose of External API used in the application	Security API, etc.
9.	External API-2	Purpose of External API used in the application	Scalability API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure	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.	Open-Source Frameworks	List the open-source frameworks used	Technology of Open source framework
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)	Technology used
4.	Availability	Justify the availability of applications (e. g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used