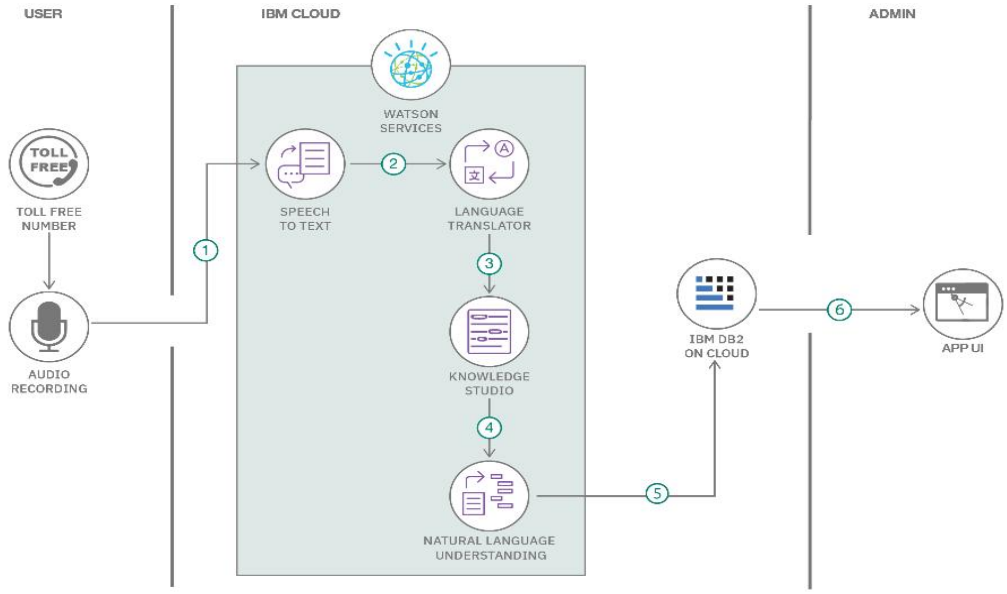
Project Design Phase-II
Technology Stack (Architecture & Stack)

Team ID	PNT2022TMID30644
Project Name	REAL TIME RIVER WATER QUALITY MONITORING SYSTEM
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Order processing during pandemics for offline mode



GUIDELINES:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

TABLE 1:

COMPONENTS AND TECHNOLOGIES:

S.NO	Component	Description	Technology
1.	User Interface	The manner in which the user interacts with the application	RFID,NFC,LTE – A, Low Energy Radio Protocols, Raspberry Pi, Rocket chat
2.	Application Logic-1	Application logic for a process	MIT App Inventor
3.	Application Logic-2	Application logic for a process	Ai2. App Companion
4.	Cloud Database	Cloud Database Service	IBM cloud ant
5.	File Storage	Storage requirements for files	IBM Block Storage or Other Storage Service or Local File system
6.	External API-1	The application's use of an external API	Speech to text recognition Application
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Kubernetes , etc.

Table-2:

Application Characteristics:

S.NO	Characteristics	Characteristics	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Open source framework
2.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used
3.	Availability	Justify the availability of application	Technology used
4.	Performance	Design consideration for the performance of the application	Technology used