Project Design Phase-II
Technology Stack (Architecture & Stack)
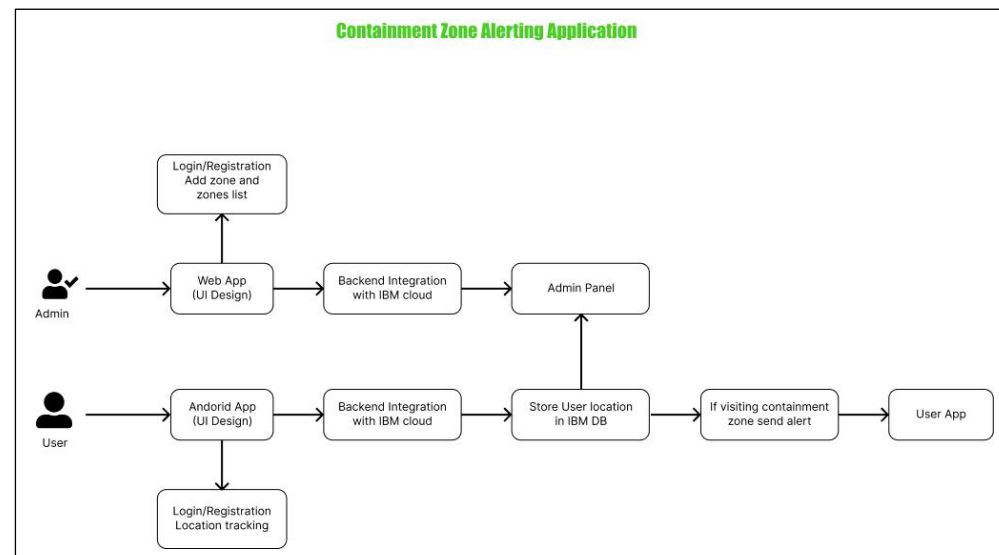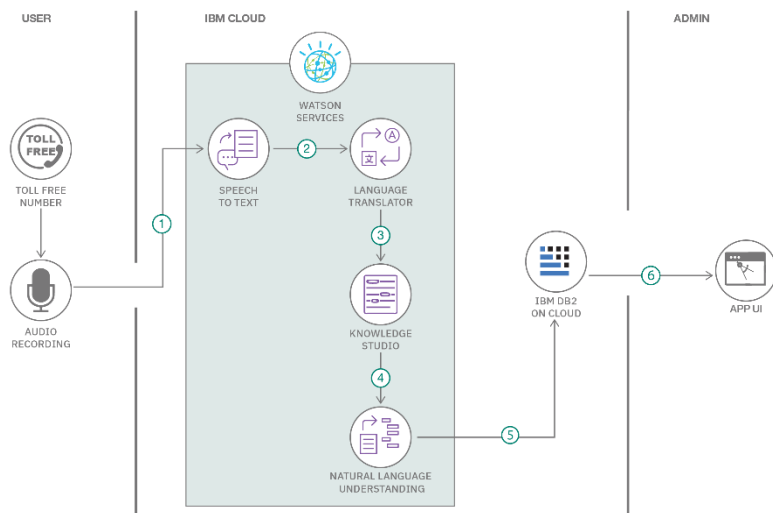
Date	03 October 2022
Team ID	PNT2022TMID42572
Project Name	Containment zone Alerting Application
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Containment zone Alerting Application

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Mobile App & Website (Admin panel)	HTML, CSS, JavaScript & Java
2.	Application Logic-1	Logic for a process in the application	Java
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Database	Data Type, Configurations etc.	MySQL
5.	Cloud Database	Database Service on Cloud	IBM DB2
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
7.	External API-1	Purpose of External API used in the application	IBM Flask API
8.	Machine Learning Model	No usage	No usage
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Cloud Server Configuration : IBM	Cloud Foundry, Kubernetes.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM 2 DB & Send grid
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256, Encryptions
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Falsk API
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	In web & mobile

S.No	Characteristics	Description	Technology
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	10000 records per month in IBM DB 2

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d