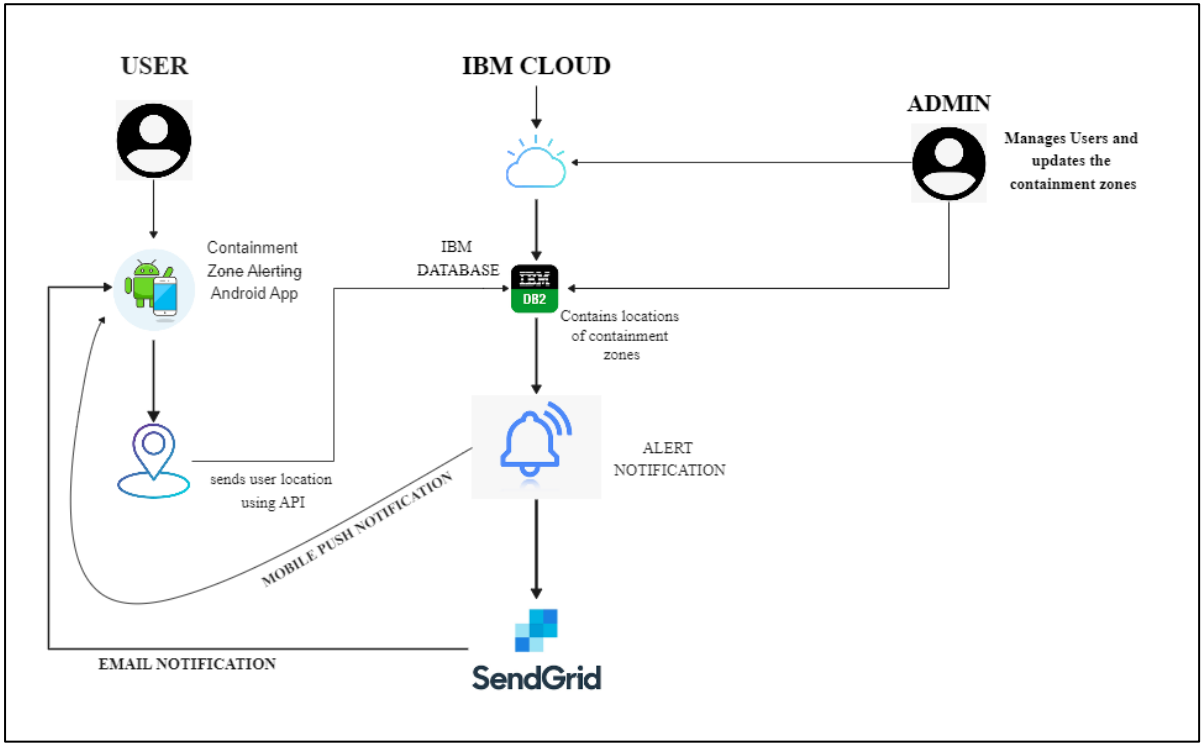
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID22391
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 table 1 & table 2



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (API's, etc.)
4. Indicate Data Storage components / services

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, Java, XML, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python-Flask
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 Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Cloud Object Storage
8.	External API-1	Purpose of External API used in the application	IBM CLOUD API, Google Maps API
9.	Infrastructure (Server / Cloud)	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.	Android Application	The android application is made using Android Studio.	JAVA and XML
2.	Frameworks	Python - Flask framework is used for development of web services. BootStrap for web designing.	Flask and BootStrap
3.	Cloud	Cloud is used for managing the components of the application	IBM Cloud and SQL
4.	Cloud Database	Cloud database is a database built to run in a public or hybrid cloud environment to help organize, store, and manage data within an organization.	IBM DB2 and IBM Cloud Object Storage
5.	Container	Containers are packages of software that contain all of the necessary elements to run in any environment.	IBM Container Registry
6.	Website (Admin)	The admin website is used to manage all the things related to the software.	HTML, CSS, Bootstrap, JavaScript
7.	Security Implementations	Android Application based Security Cloud based security	Android Security, HTTPS, Cloud security like AES-256
8.	Availability	The application will be running on cloud and it is available 24x7.	IBM Cloud
9.	Performance	The performance of the application will be fast and responsive.	Cloud based application