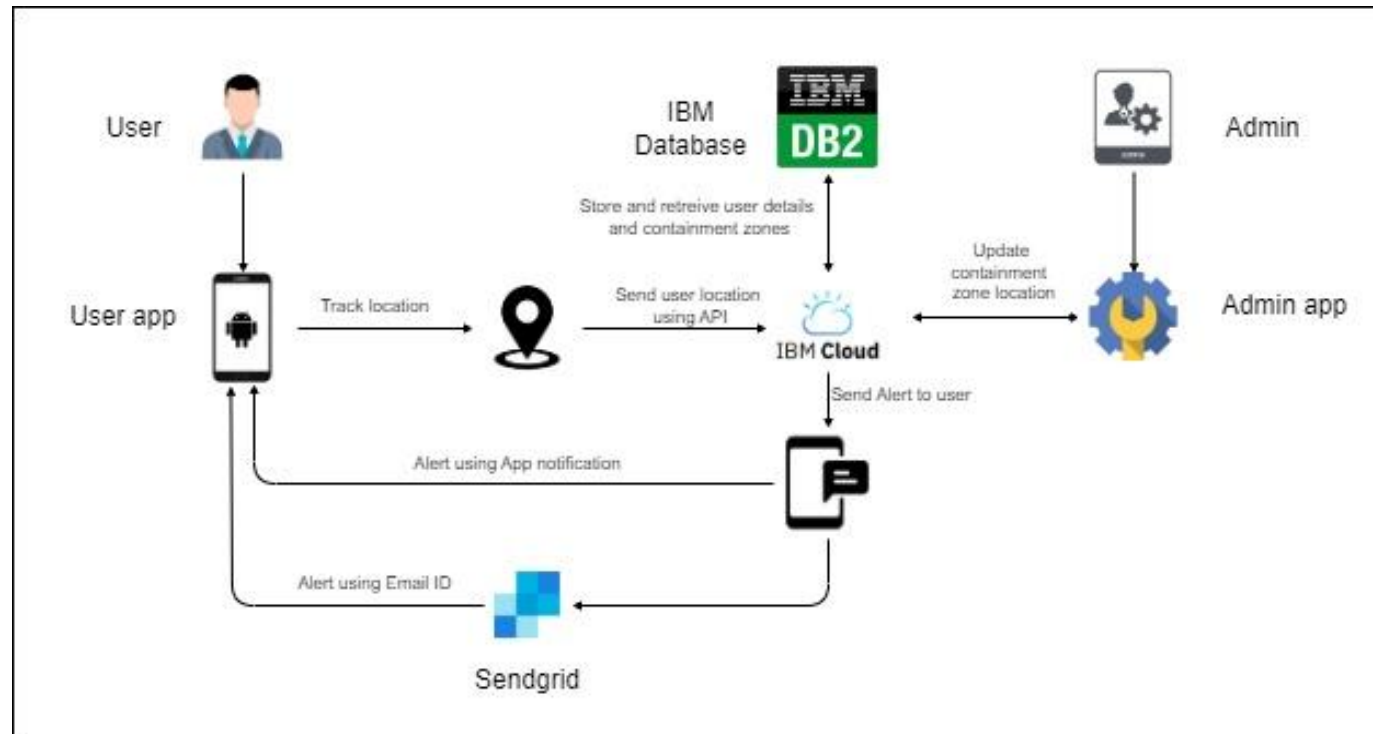


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	22 October 2022
Team ID	PNT2022TMID34803
Project Name	Containment Zone Alerting Application
Maximum Marks	4 Marks

### Technical Architecture:



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	User interacts with Web UI	HTML, CSS, JavaScript
2.	Application Logic-1	The application is developed using Flask	Java / Python-Flask
3.	Application Logic-2	The application is directly deployed in Cloud	IBM Watson STT service
4.	Database	The user credentials are stored	MySQL, NoSQL, etc.
5.	Cloud Database	Location of containment zones are stored	IBM DB2, IBM Cloudant etc.
6.	File Storage	File storage requirements	IBM Block Storage
7.	External API-1	Sends user location	IBM Weather API, etc.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud System	Local, Cloud Foundry, Kubernetes, etc.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python is used for backend purpose and flask is imported for frontend purpose	Python, Flask
2.	Security Implementations	Data inside the system will be protected against unauthorized access	AES-256, HTTPS
3.	Scalable Architecture	It can be used in any environment and user friendly	Kubernetes Cluster
4.	Availability	The application will be available 24/7	IBM Cloud container registry
5.	Performance	Fast and responsive	IBM Cloud