

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

Date	03 October 2022
Team ID	PNT2022TMID31287
Project Name	Containment Zone Alerting Application
Maximum Marks	4 Marks

Technical Architecture:

The architecture includes the architectural diagram and the table1 & table 2

Containment Zone Alerting Application:

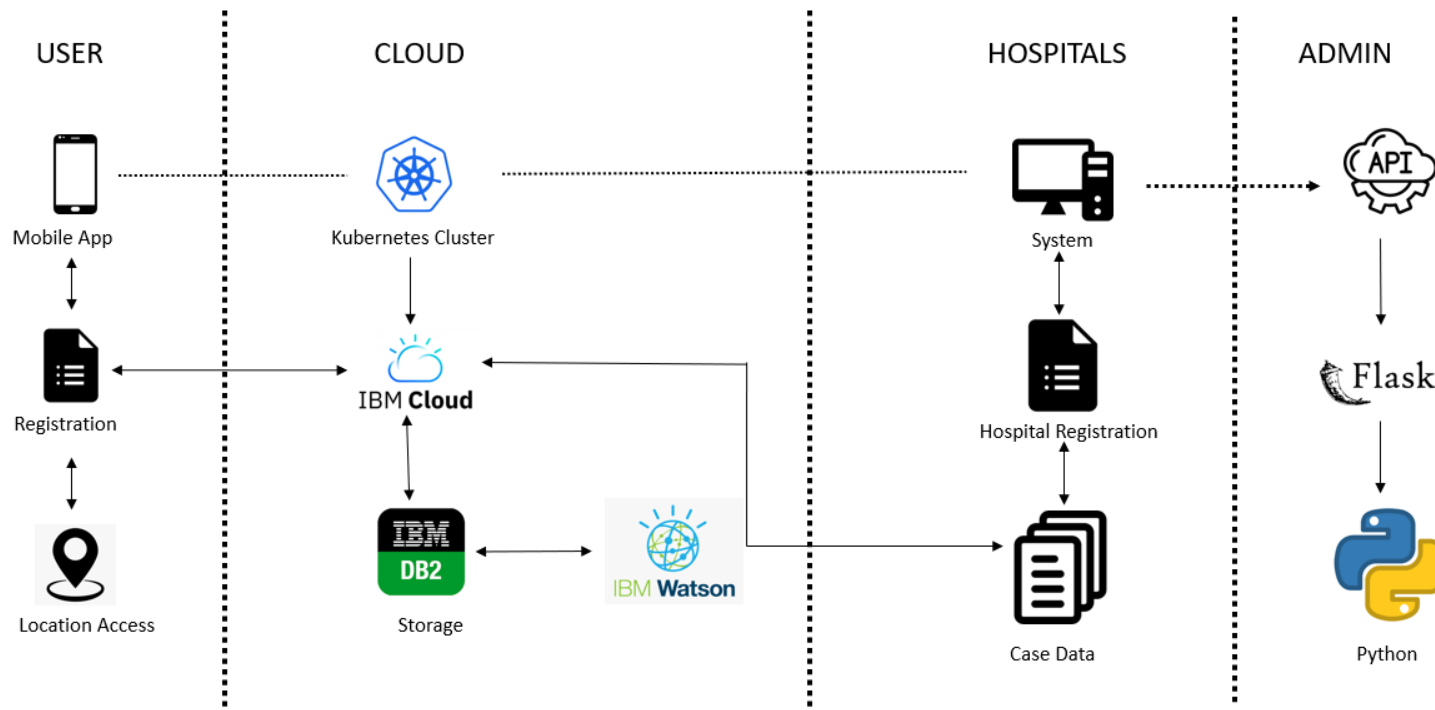


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	User access to the application through the mobile application	HTML, CSS, JavaScript ,Flask
2.	Application Logic-1	Creating an application interface	Python & Flask
3.	Application Logic-2	Creating an AI assistant that gives medical services to the user	IBM Watson Assistance
4.	Application Logic-3	Sending notifications to the user when he is in a containment zone.	Send Grid service
5.	Cloud Database	DB2 product is extended with the support of Object-Oriented features and non-relational structures with XML	IBM DB2 & Mango DB
6.	File Storage	Files are stored in the local storage and stored in the cloud.	IBM Block Storage or Other Storage Service or Local Filesystem
7.	External API-1	se this REST API to manage locations. Get all locations. URI, /admin/resources/locations. Method, GET	IBM Location REST API
8.	Deep Learning Model	Creating an algorithm to calculate case information provides by the hospitals	Object Recognition Model

9.	Infrastructure (Cloud)	IBM Cloud App Configuration is a centralized feature-management and configuration service on IBM Cloud.	IBM Cloud Foundry & Kubernetes
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Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	There are no open-source frameworks in this application.	Python
2.	Security Implementations	Blockchain technology is used for Security implementation its private framework protects all data	Block – chain
3.	Scalable Architecture	Users are provided with medical services online and giving awareness to people by giving therapeutic medicines and monitoring user movements in pandemic zones and alerts before they are affected.	IBM Cloud
4.	Availability	Medicinal Recommendations, Test kits, Doctor suggestions, and Updated Contaminated zones are available in applications.	IBM Watson Assistant
5.	Performance	The geo-fencing algorithm is updated daily and shows the day-to-day updates of the contaminated zones.	Geo – fence