

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

Date	19 October 2022
Team ID	PNT2022TMID52614
Project Name	Project – Containment zone alerting app
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

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

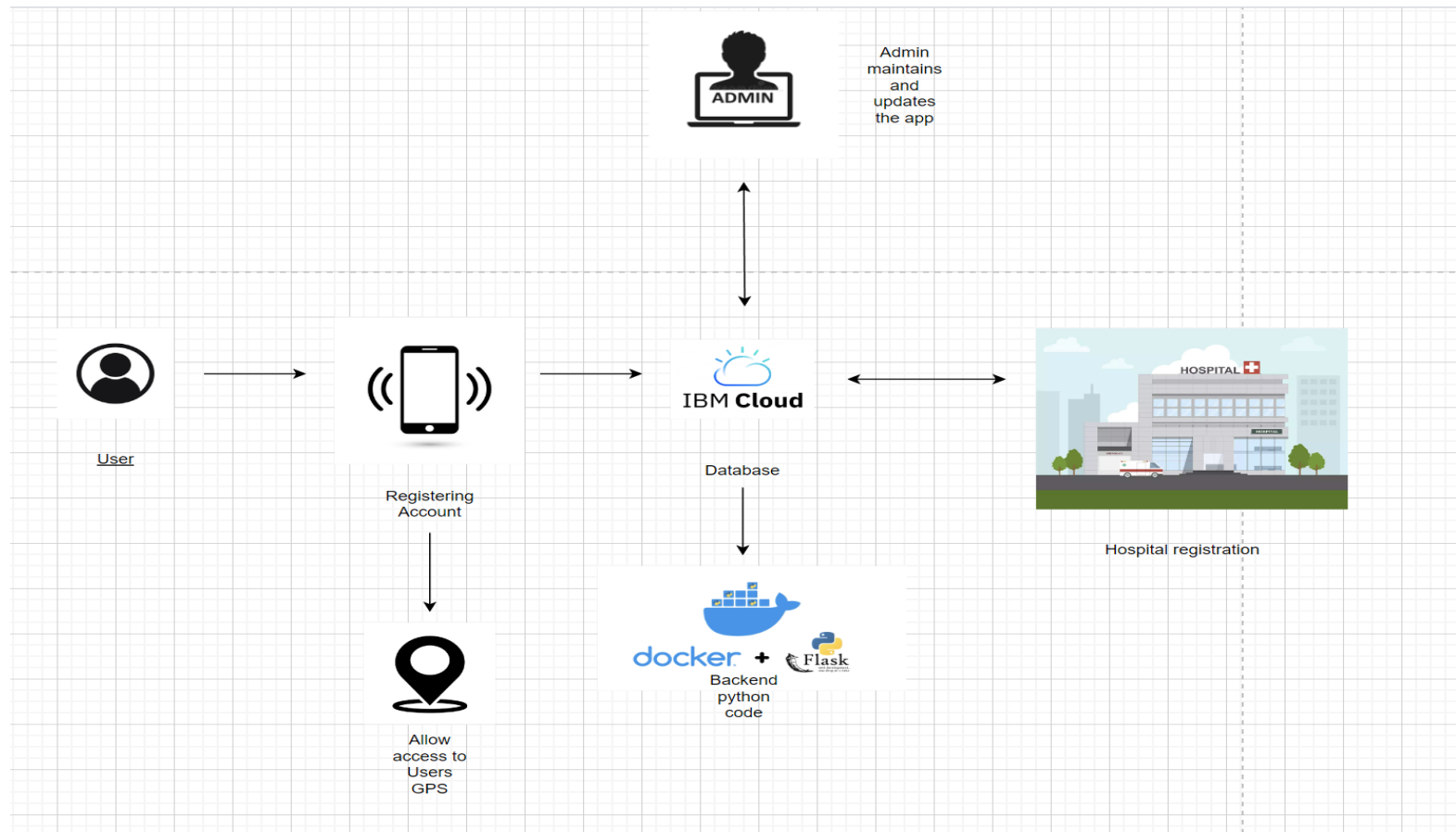


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Access through mobile app.	HTML, CSS, JavaScript Flask
2.	Application Logic-1	Application interface	Python Flask
3.	Application Logic-2	AI assistant that gives medical services	IBM Watson STT service
4.	Application Logic-3	App access send grid for location and sending alert if needed.	Send grid
5.	Database	Supports database to store users info for the app.	IBM DB 2
6.	File Storage	File storage in cloud and local storage	IBM Block Storage or Other Storage Service or Local Filesystem
7.	External API-1	With a help of REST API getting details like location of containment zone and many more	REST API
8.	Deep Learning Model	Algorithm for case information by hospitals.	Aadhar API, etc.
9.	Infrastructure (Server / Cloud)	IBM based server	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Used for backend coding.	Flask
2.	Security Implementations	Encryption of user data to keep safe from unauthorised people.	Encryption
3.	Scalable Architecture	Users are also provided services and awareness to people.	IBM Cloud
4.	Availability	Facts from doctor , contained zone, medical details if required	IBM Watson Assistant
5.	Performance	Algorithm to update the details of containment zone	Geo - fence

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>