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

Technical Architecture:

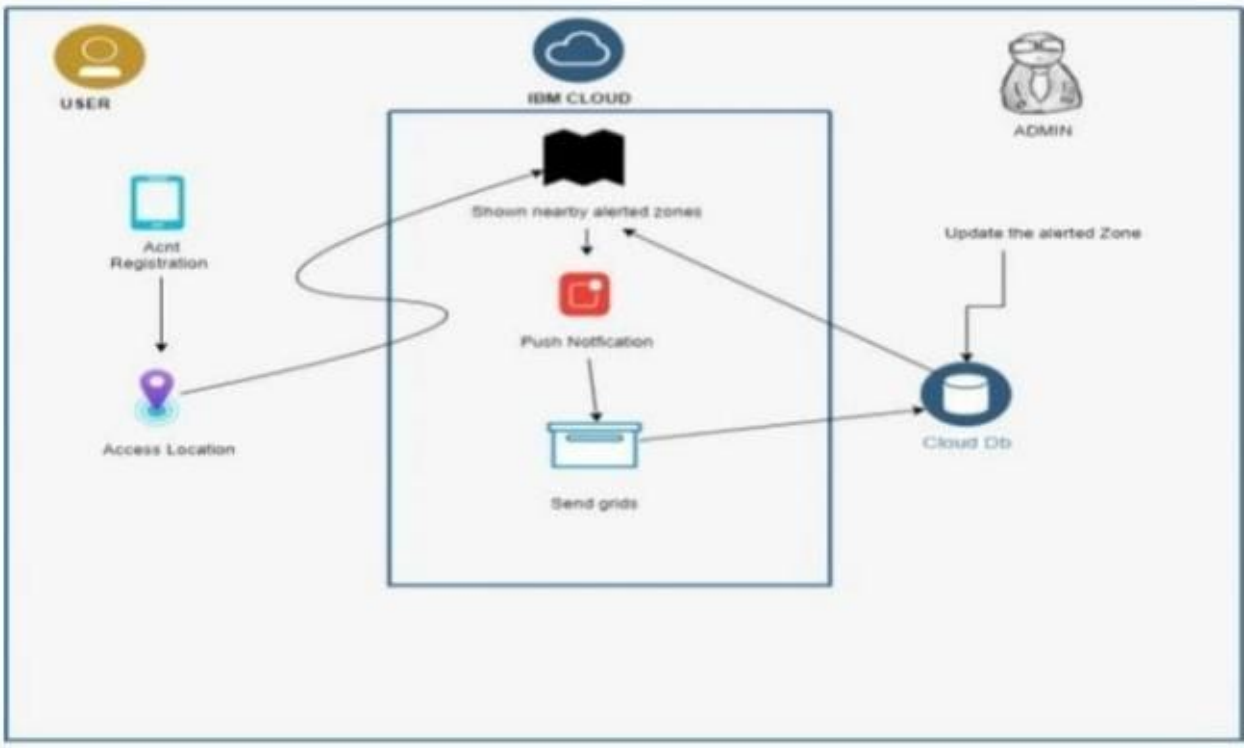
The Deliverable shall include the architectural diagram as below and the information.

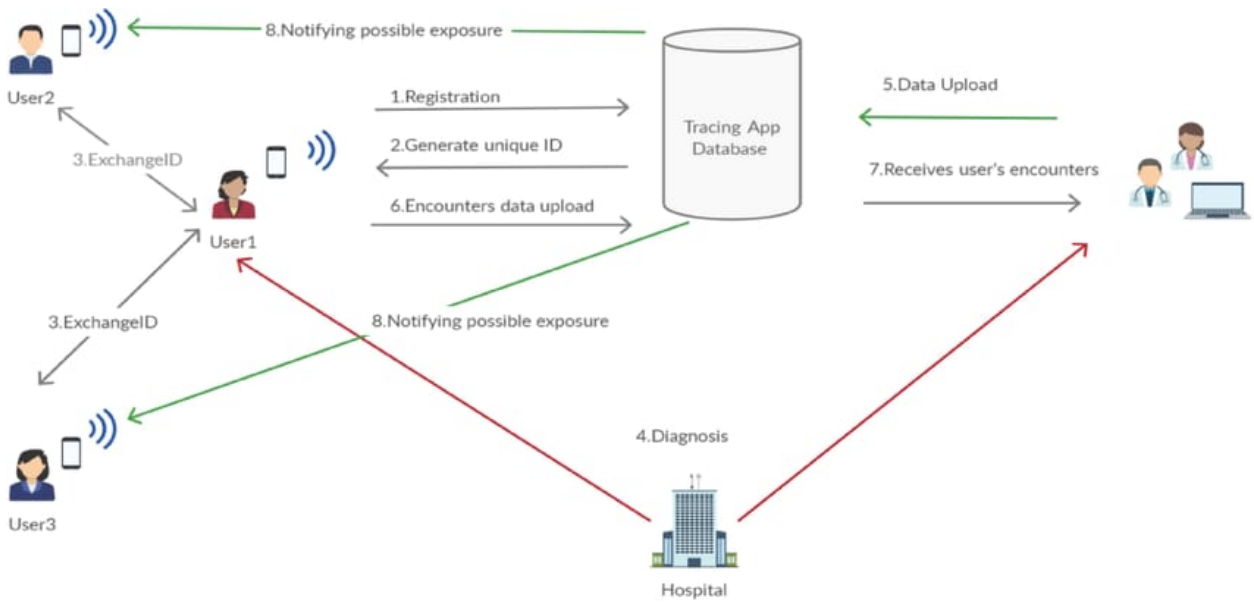
Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	App user can view about the recent updated zones.	HTML, CSS, Bootstrap.
2.	Application Logic-1	The initial step of the application to access the location from the user device.	Python
3.	Application Logic-2	By the access of the location user can see the nearby containment zone by geofencing.	IBM Watson STT service
4.	Application Logic-3	While entering into the containment zone the notification will push to	IBM Watson Assistant

		their registered email id	
5.	Database	Admin update the frequent changes of alerted Zones ,for their purpose to show aware of the user.	MySQL, NoSQL, etc.
6.	Cloud Database	All the datas are push in the IBM cloud.	IBM DB2, IBM Cloudant etc.
7.	File Storage	The files are stored in the Binary format.	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	They can show of their Weather conditions from their imported dependencies.	IBM Weather API, etc.
9.	External API-2	For the purpose of User registeration and their convienence for better interaction to get an better visuals.	Aadhar API, etc.
10.	Machine Learning Model	For the easy segregation of data in the entered datas , model can plotted to their respective columns.	Object Recognition Model, etc.

11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: shown the nearby zones Cloud Server Configuration : updated the newly alerted zones	Local, Cloud Foundry, Kubernetes, etc.





Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	We used an Flask framework the development of python.	Flask
2.	Security Implementations	Session based authentication.	Flask Security

		Role management. Password hashing. Basic HTTP authentication. Token based authentication. Token based account activation (optional) Token based password recovery / resetting (optional) User registration (optional	
3.	Scalable Architecture	This micro-framework modularize the entire code and let developers work on independent chunks and use them as the code base grows.	Flask - python

4.	Availability	it does is precompute the output of an operation that usually takes a lot of time otherwise. Once this precomputed output is stored somewhere, the next user request doesn't involve rerunning all the subprocesses of that operation but instead just serving the precomputed output (instead of rerunning the same piece of expensive code	Flask Reliability
5.	Performance	Flask is the most popular microframework for web programming in Python. Known for its lightweight build and flexibility, it is a fan favourite amongst beginners	Frame Work

		because of how easy it is to get started with, especially for building prototypes and smallscale projects	