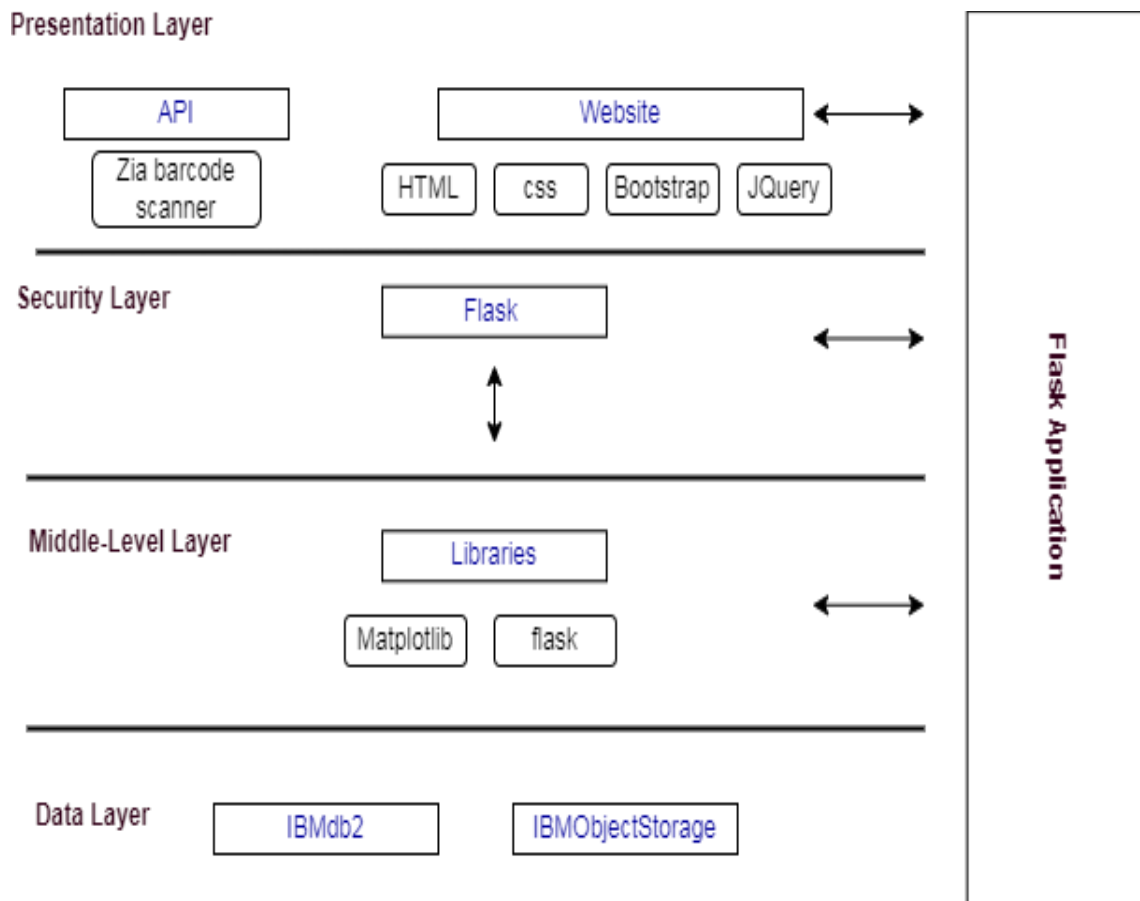


## PROJECT DESIGN PHASE -2

### TECHNOLOGY ARCHITECTURE

Date	14 November 2022
Team ID	PNT2022TMID51354
Project Name	Project – Containment Zone Alerting Application
Maximum Marks	4 Marks

#### TECHNICAL ARCHITECTURE:



**Table-1:COMPONENTS AND TECHNOLOGIES:**

S.No	Component	Description	Technology
1	User Interface	Web UI	HTML, CSS, Bootstrap, JQuery
2	Alert and Notification	Alerting the user regarding the containmented area	SendGrid
3	Cloud Database	Database Service on Cloud	IBM DB2
4	File Storage	File storage requirements	IBM Object Storage
5	External API-1 Barcode	To Scan to know user details	Zia Barcode Scanner
6	Infrastructure (Server / Cloud)	Cloud Server Configuration	Cloud Foundry, Kubernetes

**Table-2: APPLICATION AND CHARACTERISTICS:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Styling our page, Python flask microframework	Python Flask, Bootstrap
2.	Security Implementations	For securing our cloud data	SSL Certificates
3.	Scalable Architecture	Three – tier architecture (MVC)	Web server - HTML, CSS, Javascript Application server - Python Flask, Docker, Container Registry Database server - IBM DB2
4.	Availability	availability of application	IBM Load Balancer
5.	Performance	5 requests per seconds, Use of Local Machine Cache Memory	IBM Cloud, CDN