

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

Date	15 October 2022
Team ID	PNT2022TMID53054
Project Name	Project - Inventory Management System for Retailers
Maximum Marks	4 Marks

Technical Architecture:

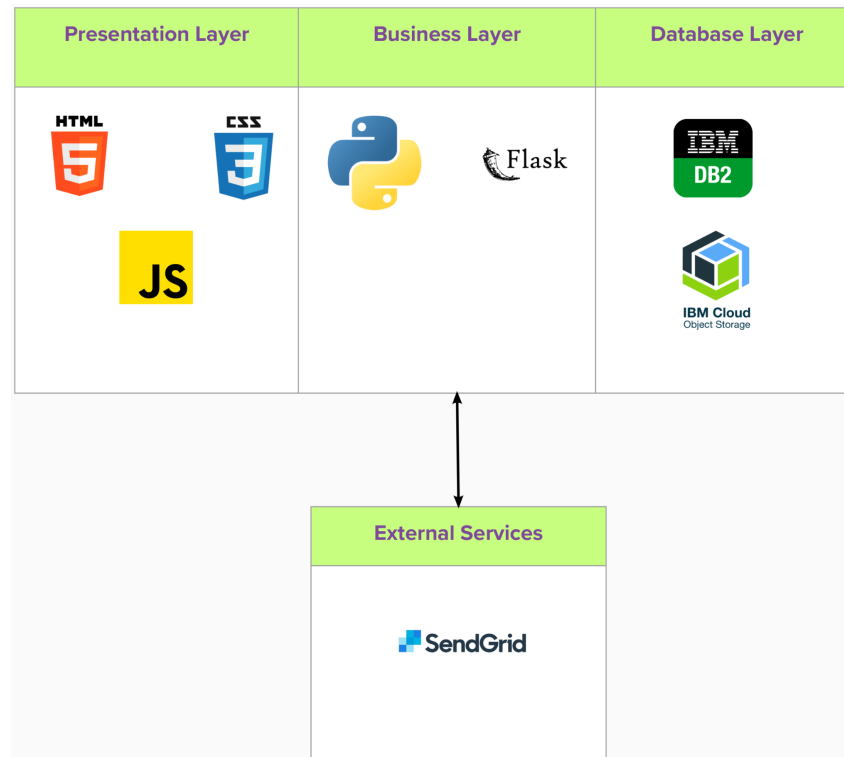


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application - Web UI	HTML, CSS, JavaScript
2.	Application Logic-1	Data visualization using Matplotlib	Python
3.	Application Logic-2	Used to direct the user to a specific page based on the request	Flask
4.	Cloud Database	Database Service on Cloud	IBM DB2
5.	File Storage	File storage requirements	IBM Cloud Object Storage
6.	External Services-1	Used to send email alerts	Sendgrid
7.	Infrastructure (Cloud)	Application Deployment on Cloud	IBM Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Flask and Bootstrap
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	MVC	Model - IBM DB2 View - HTML, CSS, JS Controller - Python, Flask
4.	Availability	Directs network traffic flow when the load in a particular server is very high	IBM Load Balancer
5.	Performance	Content is distributed in geographically diverse nodes	CDN IBM Cloud