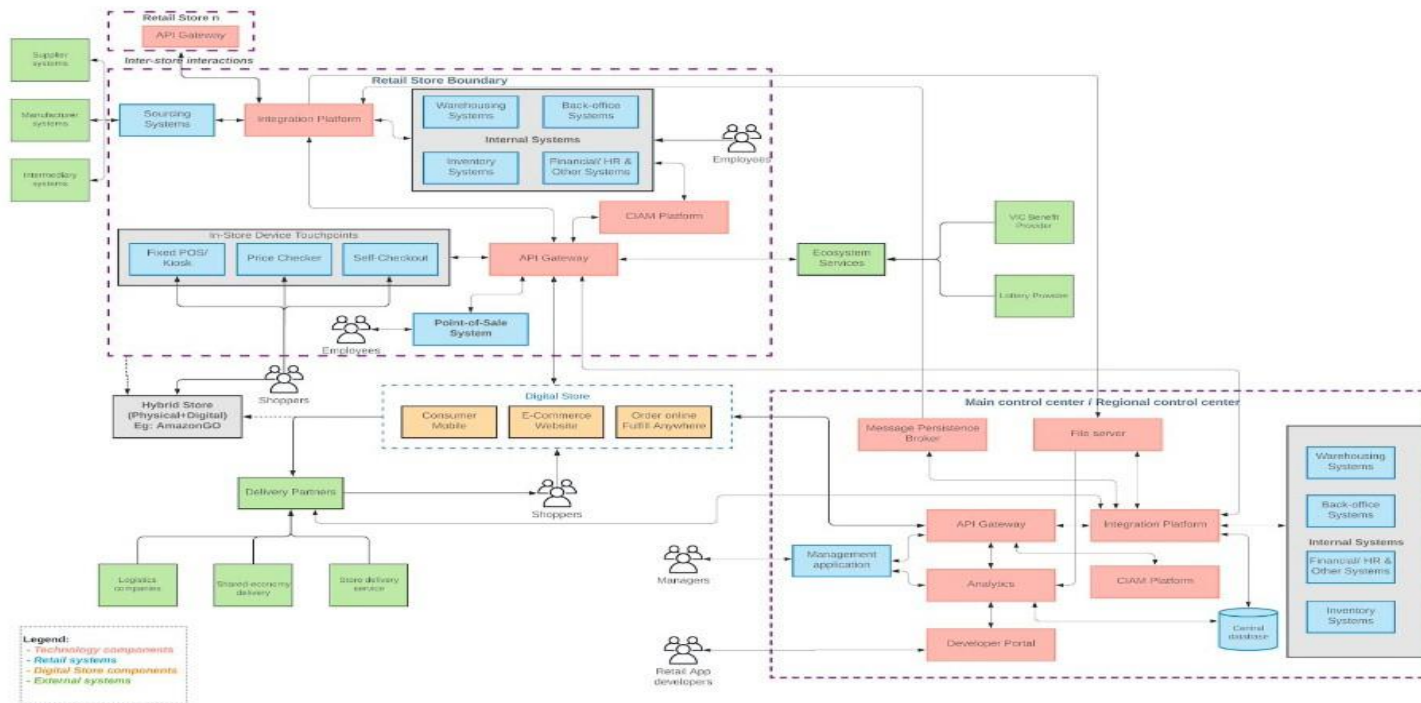


Project Design Phase-II Technology Stack (Architecture & Stack)

Date	16 October 2022
Team ID	PNT2022TMID47924
Project Name	Retail Store Stock Inventory Analytics
Maximum Marks	4 Marks

Technical Architecture:

Retail Store Stock Inventory Analytics



Reference:

<https://app.mural.co/invitation/mural/retail1368/1665762984049?sender=ub44e5abfa2c3009380c26513&key=716f7133-7b4e-4790-aa4a-ae17ecc88001>

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can interacts with application using web based user interface	HTML, CSS, JavaScript , React Js
2.	Application Logic-1	To manipulate analyze and for work with complex process in the application	Python
3.	Application Logic-2	For exhibit analytics process in the application	IBM Watson STT service
4.	Application Logic-3	Build conversational interface process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Local Filesystem
8.	External API-1	Provide better user experience while utilizing the retail stores and check availability of products and automate process of refilling products when go out of stock	IBM API Connect
9.	Machine Learning Model	For different ways of analyzing the products	Linear regression, multiple regression, k nearest neighbor
10.	Infrastructure (Cloud)	Application Deployment on Cloud Cloud Server Configuration : ibm	Local, Cloud Foundry.
12.	Integration platform	Interconnects various internal systems with each other as well as with external partner systems through B2B	IBM Integration Toolkit

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Inventory accounting, and management practices	Python, REST API
2.	Security Implementations	Customer and administrator registration authentication and resource authorization	Javascript
3.	Scalable Architecture	Achieve presentation, application and user interface	React js, Python
4.	Availability	This application is availability to all users at everywhere	IBM cloud hosting
5.	Performance	The user can know how to maintain the inventory to increase point of sales	ML algorithms