

INVENTORY MANAGEMENT SYSTEM FOR RETAILERS

TECHNOLOGY STACK (Architecture & Stack)

Technical Architecture:

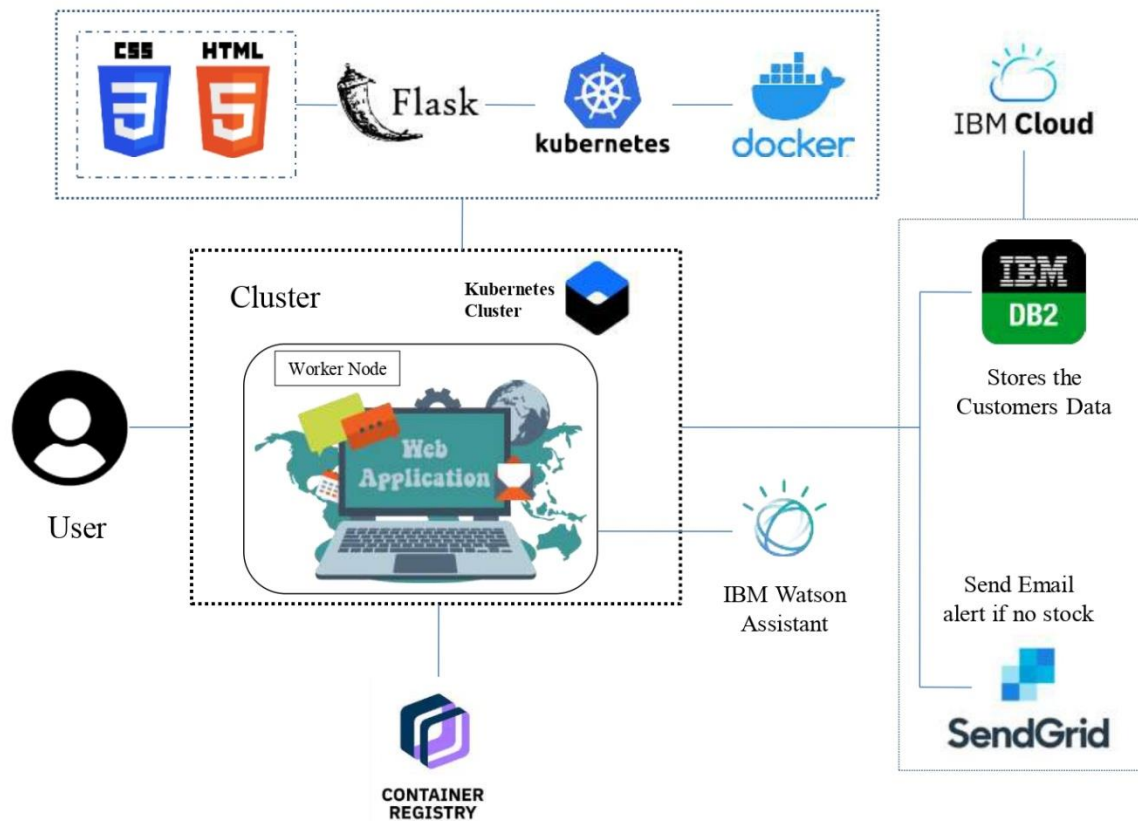


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App, Chatbot	HTML, CSS, JavaScript ,Query etc.
2.	Calculating Product Count	By entering barcode details into the application	Barcode Scanner
3.	Alert and notification	Alerting the retailers regarding the low stock count of the product	Send Grid
4.	Cloud Database	Database Service on cloud	IBM DB2
5.	Chat	Chat with Watson assistant	IBM Watson Assistant
6.	File Storage	File Storage Requirements	IBM Object Storage
7.	Infrastructure	Cloud Server Configuration	Cloud Foundry , Kubernetes

Table-2: Application Characteristics:

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

