

INVENTORY MANAGMENT SYSTEM FOR RETAILERS

ABSTRACT:

An Inventory Management System for Retailers helps them to manage goods stock efficiently. This system will help the retailers meet customer demand without running out of stock or carrying excess supply.

Effective retail inventory management results in lower costs and a better understanding of sales patterns. Retail inventory management tools and methods give retailers more information on which to run their businesses. Applications have been developed to help retailers track and manage stocks related to their own products.

PROJECT OBJECTIVES:

1. To avoid both overstocking and under-stocking of inventory.
2. To optimize various costs indulged with inventories like purchase cost, carrying a cost, storage cost, etc.
3. To minimize loss through deterioration, pilferage, wastages, and damages.
4. To facilitate furnishing of data for short and long-term planning with a controlled inventory.

USECASES:

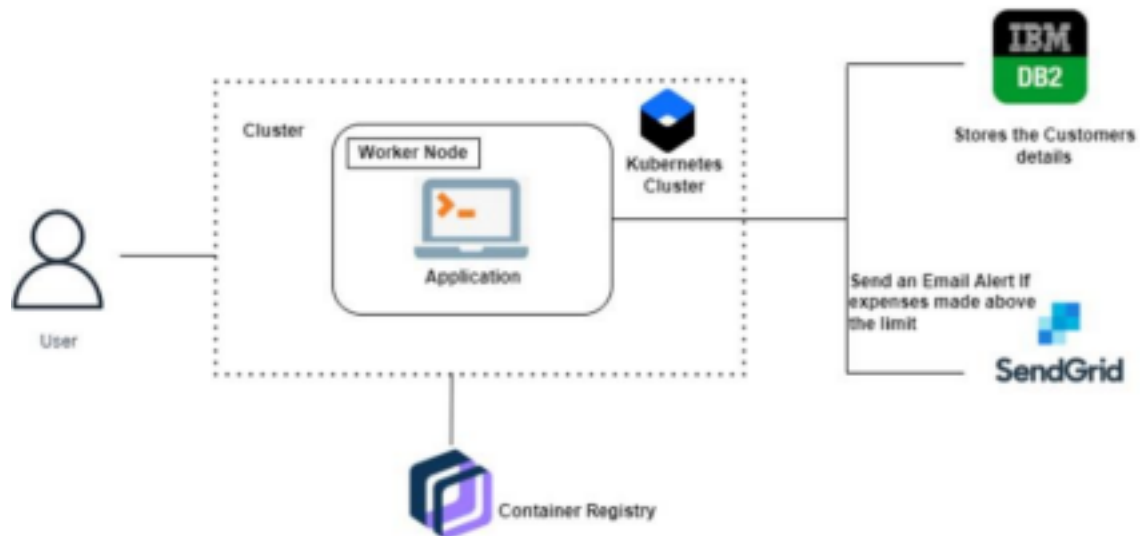
1. With proper inventory management, you spend money on inventory that sells, so cash is always moving through the business.
2. Helps customer in receiving the items they want without waiting.
3. Helps the retailers understand the sales pattern.

PROJECT FLOW:

1. Setting up Application Environment
 - 1.1. Create Flask Project

- 1.2. Create IBM Cloud Account
- 1.3. Install IBM Cloud CLI
- 1.4. Docker CLI Installation
- 1.5. Create an account in SendGrid
2. Implementing Web Application
 - 2.1. Create UI to interact with the Application
 - 2.2. Create IBM DB2 and connect with Python
3. Integrating SendGrid Service
4. Deployment of App in IBM Cloud
 - 4.1. Containerize the App
 - 4.2. Upload Image to IBM Container Registry
 - 4.3. Deploy in Kubernetes Cluster

TECHNICAL ARCHITECTURE:



SYSTEM REQUIREMENTS:

1. 8GB RAM
2. Intel Core i3

3. OS - Windows/Linux/MAC

4. Laptop/ Desktop

SOFTWARE REQUIREMENTS:

1. Python

2. Flask

3. Docker