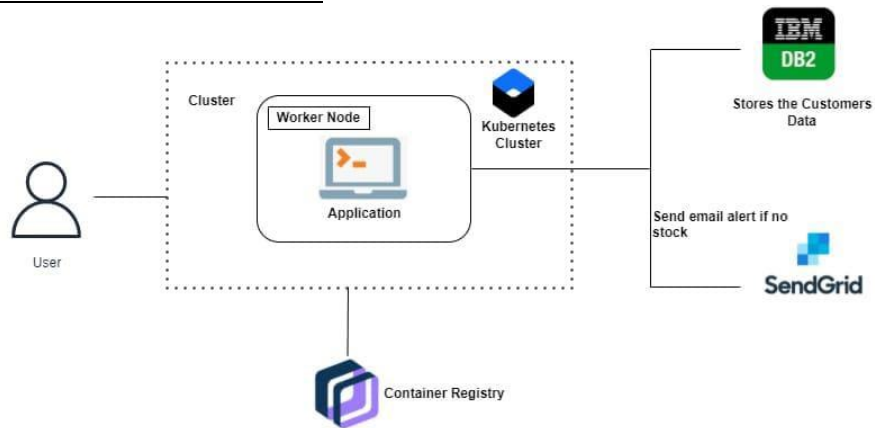


Project Design Phase-I Proposed Solution Template

Date	10 October 2022
Team ID	PNT2022TMID45514
Project Name	Project - Inventory Management System for Retailers
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> Basic Questions of every retailer : How much inventory should I carry? Too much inventory means working capital costs, operational costs and a complex operation, lack of inventory leads to lost sales, unhappy customers and a damaged brand
2.	Idea / Solution description	<p>The application provide real time alerts. With time optimize processes and create the best way forward. It also provide Hassle-free order creation through a single click. Eliminates onsite visits for order acquisition & saves time real time.</p> <p><u>TECHNICAL ARCHITECTURE</u></p>  <pre> graph LR User((User)) --- Cluster subgraph Cluster direction TB subgraph WorkerNode [Worker Node] Application[Application] end CR[Container Registry] end Application --- CR Application --- K8s[Kubernetes Cluster] K8s --- DB2[IBM DB2] K8s --- SendGrid[SendGrid] DB2 --- SendGrid SendGrid --- Alert[Send email alert if no stock] </pre> <p>The diagram illustrates the technical architecture of the system. A User interacts with a Cluster. The Cluster contains a Worker Node with an Application and a Container Registry. The Application is connected to the Container Registry and a Kubernetes Cluster. The Kubernetes Cluster is connected to IBM DB2 (which stores customer data) and SendGrid. SendGrid is configured to send email alerts if there is no stock.</p>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> Automatically generate reports periodically to know what is going on and take decisions real time. No more hassles of having multiple portals for filling reimbursements. Single interface for all kinds of updates with

		status tracking.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • Hassle-free order creation through a single click. Eliminates onsite visits for order acquisition & saves time real. • Otp based authentication
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • Free of cost to access the website • Multi user web application
6.	Scalability of the Solution	<ul style="list-style-type: none"> • Simple in nature • Track field agent in real time • Can be accessed in offline mode also