

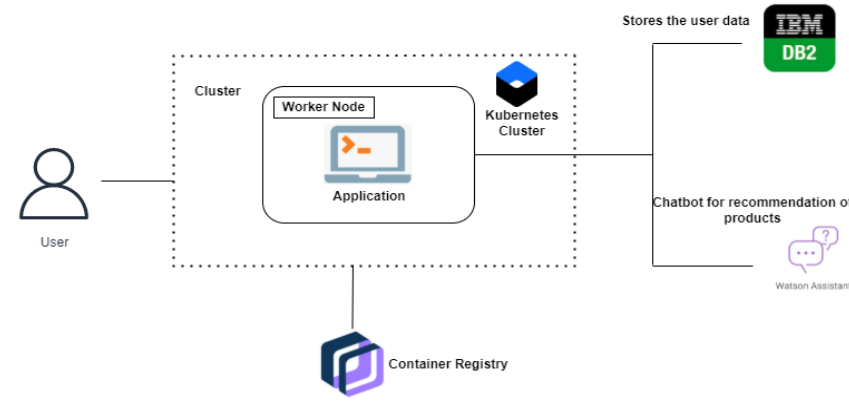
## PROJECT DESIGN PHASE - I

### PROPOSED SOLUTION

Date	22 September 2022
Team ID	PNT2022TMID54054
Project Name	Smart Fashion Recommender Application
Maximum Marks	2 Marks

#### SMART FASHION RECOMMENDER APPLICATION

S.NO.	PARAMETER	DESCRIPTION
1.	Problem Statement	<ul style="list-style-type: none"><li>• In E-commerce websites, users need to search for products and navigate across screens to view the product and order product.</li><li>• A new innovative solution came up through which can directly make online shopping based on the choice of the user without any search.</li><li>• It can be done by using the chatbot which can be achieved by a smart fashion recommender application.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>• The smart fashion recommender application leverages the use of a chatbot to interact with the users, gather information about their preferences, and recommend suitable products to the users.</li><li>• User can be able to mention their preferences by interacting with chatbot.</li><li>• The user must receive a notification on order confirmation/failure.</li><li>• The chatbot must gather feedback from the user at the end of order confirmation.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>• Chatbot asks and learns from user preference which recommends appropriate products to the user without making them search through various filters which reduces time and thus increases sales.</li><li>• Instead of searching manually a chatbot will help to find the right product effectively, with this feature user can save time and it is an easy process, chat keep sending a notification about new collections.</li></ul>

4.	<b>Social Impact / Customer Satisfaction</b>	<ul style="list-style-type: none"> <li>• <i>Feedback from the user at the end of the session or after placing an order is one of the most important factors in deriving customer satisfaction and providing better services.</i></li> <li>• <i>The model can recommend products that are more suitable to the customer.</i></li> <li>• <i>Directly do online shopping based on customer choice without any search.</i></li> <li>• <i>It can also save a lot of time.</i></li> </ul>
5.	<b>Business Model</b>	<ul style="list-style-type: none"> <li>• <i>Due to market dynamics and customer preferences, there is a large vocabulary of distinct fashion products, as well as high turnover.</i></li> <li>• <i>This leads to sparse purchase data, which challenges the usage of traditional recommender systems.</i></li> <li>• <i>Better experience and Feasibility.</i></li> </ul>  <pre> graph LR     User((User)) --- Cluster     subgraph Cluster         direction TB         subgraph WorkerNode [Worker Node]             Application[Application]         end         subgraph K8s [Kubernetes Cluster]             direction TB             App[Application]             DB[Stores the user data IBM DB2]             Chatbot[Chatbot for recommendation of products Watson Assistant]         end     end     Application --- K8s     K8s --- CR[Container Registry]   </pre>
6.	<b>Scalability of the Solution</b>	<ul style="list-style-type: none"> <li>• <i>The solution can be made scalable by using micro service architecture provided that each server is responsible for certain functionality of the application.</i></li> <li>• <i>Storing user preferences along with the product in the browser cookie will enable it to provide a response instantly and allows for fetching related products.</i></li> <li>• <i>The scalability can be increased by increasing the number of products and also the accuracy of the product suggestions.</i></li> </ul>