Project Design Phase-II Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID48338
Project Name	Smart Fashion Recommender Application
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation and also via Chatbot
FR-3	Watson Assistant Chatbot	Inorder to reduce the navigation of searching the required products, Chatbot is used to recommend the suitable product based on the user queries and get the perfect recommendation within minutes.
FR-4	Payment	Authentication, Transaction corrections, adjustments and cancellations.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	A chatbot is used to process the information and perform filtering to predict the products that users will like and accordingly rate the products based on users' preferences. A recommender system easily highlights the most relevant products to the users and ensures faster conversion.
NFR-2	Security	The user's personal information, ratings, and the storage and generation of recommendations are protected against malware attacks and information theft.

NFR-3	Reliability	Main task of chatbot is to provide recommendations to the users, with the goals like obtaining enough reliable information about the user's preferences to support their users' decision-making process or to help them find relevant information.
NFR-4	Performance	The common way to assess the performance of a recommender system would be through standard metrics such as Accuracy, Precision or Recall. However, these metrics require ground truth knowledge about which recommendations are correct, which is hard to obtain at a large scale in our specific problem setting. In the absence of sufficient amounts of ground truth data, alternative metrics need to be used.
NFR-5	Availability	The Product Availability action lets the chatbot look for specific products in the Shopify store and display matched items as personalized recommendations in the chat. Bots can also boost sales, because of their 24/7 availability and fast responses rate. Service availability is simply the measure of the service being available and accessible to the customers during the time you promised to keep the service available. It's usually calculated as a percentage.
NFR-6	Scalability	A Chatbot efficiently scales horizontally to handle millions of users and interactions per day. Chatbots can increase engagement by up to 90% and sales by 67%