Project Design Phase-I
Proposed Solution

Date	**24 September 2022**
Team ID	**PNT2022TMID39615**
Project Name	**Smart Fashion Recommender Application**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	One biggest issue is the scalability of algorithms having real-world datasets under the recommendation system, a huge changing data is generated by user-item interactions in the form of ratings and reviews and consequently,scalability is a big concern for these datasets.The recommendation system is because of information overload, and we can call it an information flter system. It greatly infuences what we interact with the world: shopping (Amazon, Best Buy), music(Spotify), video(Youtube, Netfix),etc. To build a recommendation system providing recommendations to millions of users with millions of items, the first thing is, define the problem.
2.	Idea / Solution description	The goal of this survey is to provide a review of recommender systems that operate in the specific verticaldomain of garment and fashion products. We have identified the most pressing challenges in fashion RSresearch and created a taxonomy that categorizes the literature according to the objective they are trying toaccomplish (e.g., item or outfit recommendation, size recommendation, explainability, among others) and typeof side-information (users, items, context). We have also identified the most important evaluation goals andperspectives (outfit generation, outfit recommendation, pairing recommendation, and fill-in-the-blank outfitcompatibility prediction) and the most commonly used datasets and evaluation metrics.
3.	Novelty / Uniqueness	Recommender systems help users navigate large collections of products to find items relevantto their interests leveraging large amounts of product information and user signals like productviews, followed or ignored items, purchases or web-page visits to determine how, when and whatto recommend to their customers. Recommender systems have grown to be an essential part of alllarge Internet retailers.

4.	Feasibility of Idea	Due to market dynamics and customer preferences, there is a large vocabulary of distinct fashionproducts, as well as high turnover. This leads to sparse purchase data, which challenges the usageof traditional recommender systems . Furthermore, precise and detailed product information isoften not available, making it difficult to establish similarity between products.To deal with the aforementioned problems, and given the visual and aesthetic nature of fashionproducts, there is a growing body of computer vision research addressing tasks like localizingfashion items determining their category and attributes or establishingthe degree of similarity to other products, to name only a few.
5.	Business model(Revenue model)	Traditional recommender systems such as Collaborative Filtering or Content-Based Filtering have difficulties in the fashion domain due to the sparsityof purchase data, or the insufficient detail about the visual appearance of the product incategory names . Instead, more recent literature has leveraged models that capturea rich representation of fashion items through product images, text descriptionsor customer reviews or videos which are often learned through surrogatetasks like classification or product retrieval.
6.	Social impact/ Customer Satisfaction	The textile and apparel industries have grown tremendously over the last years. Customers no longer have tovisit many stores, stand in long queues, or try on garments in dressing rooms as millions of products are nowavailable in online catalogs. However, given the plethora of options available, an effective recommendationsystem is necessary to properly sort, order, and communicate relevant product material or information tousers. Effective fashion RS can have a noticeable impact on billions of customers' shopping experiences andincrease sales and revenues on the provider-side.
7.	Scalability of the solution	By implementing this system , the people can efficiently and effectively predict the quality of the products. This system can also be integrated with the future Technologies.