## **Ideation phase**

### Literature survey

Date	16 October 2022
Team id	PNT2022TMID16527
Project	Smart Fashion Recommender Application
Maximum Marks	

### **Abstract:**

In recent years, the textile and fashion industry has experienced a fast growing fashion. On e-commerce platforms, where there are many choices, Referral system is necessary to effectively categorize, organize and communicate relevant content of the product or information for users. The image-based mode recommendation system (FRS) has attracted a lot of attention lots of attention from fast fashion retailers as they offer personalized shopping experiences for consumers. In this project the software used are Python, Flask, Docker. In this project there are two modules Admin and user. The role of the admin is to check out the database about the stock and have a track of all the things that the users are purchasing. The user will login into the website and go through the products available on the website. Instead of navigating to several screens for booking products online, the user can directly talk to Chatbot regarding the products. Get the recommendations based on information provided by the user.

# 1.An intelligent personalized fashion recommendation system by Qingqing Tu, Le Dong:

In this article, we propose a new system, Intelligent Personalized Fashion Recommendation System, which creates a new space for web multimedia mining and recommendation. The proposed system will greatly help customers to find the best fashion choices from a large amount of fashion information in a virtual space based on multimedia mining. In this article, three stand-alone models are developed to streamline the analysis of fashion traits in mass fashion trends.

A dialogue and recommendation model that connects the personalized demands of customers to current fashion trends, helping customers find the most advantageous fashion elements in trends. (ii). An evolutionary hierarchical modal multimedia mining model that creates a hierarchical structure for archiving the key components of modal multimedia information in a virtual space. Evolutionary methods have been found to improve the efficiency of web bulk multimedia mining. (iii). The hue analysis model is a good and

straightforward approach for analyzing the dominant hues of skin and clothing. In this model, a sophisticated contour extraction mode model method is also developed to solve the dilemma of contour extraction accuracy and efficiency in dynamic and complex video scenes. As shown by experiments, the proposed system outperforms the effectiveness of large amounts of fashion information in the virtual space compared to humans, and develops personalized and diverse ways of fashion.

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# 2.Personalized clothing-recommendation system based on a modified Bayesian network Lin Yu-Chu, Yuusuke Kawakita, Etsuko Suzuki, Haruhisa Ichikawa:

This article presents a clothing recommendation system that recommends individual combinations from the user's wardrobe. Online shopping sites use a recommendation system to recommend items that users might be interested in. These systems make recommendations to users based on the behaviour of other users, assuming that all users behave the same way; Personal preferences are not taken into account. However, a clothing recommendation system should make recommendations on personal item selection based on personal preferences rather than the behaviour of other users, as it is rare to find another user possessing the same clothing target user. The recommended system makes recommendations specifically tailored to the user based on the user's personal preferences, clothing item history, and the user's ratings of previous system recommendations. The test results show that in most cases the system can recommend more suitable clothing combinations than existing systems under the same conditions.

## 3.Size recommendation system for fashion e-commerce G Mohammed Abdulla, Sumit Borar:

Understanding user size preferences in addition to style preferences is an essential aspect of fashion e-commerce. Unlike offline shopping, in online fashion shopping, customers do not have the opportunity to try on a product, but must rely on product images and size charts to choose a product that fits them. Because of this difference, online shopping generates a high percentage of profit due to size and fit. Also, explicitly suggesting a user's body size or shape doesn't scale well. In this article, we propose a size recommendation system to automatically preselect consumer sizes based on past purchases and asset data without explicitly requiring user measurements. use. We use a word2vec model based on skipping grams on our purchase data to learn the latent representation of all our products and users in a generally suitable size and space., thus allowing the concept of similarity between different products and product users. The gradient-enhanced classification model was further used on both the learned latent characteristics and the observed characteristics (such as the user's estimated breast size, product fit, etc.) to

predict the user's favourite product size. The effectiveness of the proposed algorithm is confirmed by extensive tests on real-world data. In addition, we collect the body shape of different users and collect insights from their returning behaviour on our platform.

## 4.CFRS: a trends-driven collaborative fashion recommendation system Maria Anastassia Stefani, Vassilios Stefanis, John Garofalakis

People pay close attention to how they dress because fashion has a great impact on their daily lives. Fashion item recommendation is typically a manual curated process, where experts recommend items and trends to a large population. However, automated and personalized recommendation systems are increasingly being used and have valuable applications in e-commerce websites. In this article, we propose a collaborative fashion recommendation system called CFRS. In addition to the traditional functionality, we propose a new metric called Trend Score. The trend score is a score that expresses the popularity of a product, calculated based on evaluations by CFRS users (fashion experts, registered users). In particular, users rate current trends in colors, prints and materials (Like/Like scale). Finally, trend scores are used to a) classify products in each category from the trendy to classic options and b) recommend trending products in various clothing categories.

#### **Conclusion:**

Recommendation systems have the potential to open up new opportunities for retailer. By allowing consumers to make tailored recommendations based on information they find on the internet. They help consumers find products instantly. Perfect service for your choice. In addition, various state-of-the-art algorithms. Designed to recommend products based on user interactions with social networks group. Therefore, there has been a lot of recent research into embedding social media images into fashion recommendation systems. This paper presents a review's fashion recommendation system is based on algorithmic models and filter techniques to scientific articles on this topic. Technical aspects, advantages and disadvantages of filtering techniques are explained in detail for future reference. Researchers gain a deep understanding of fashion recommendation systems.