## TOP 3 IDEAS FOR SMART FASHION RECOMMENDER APPLICATION BASED ON FEASIBILITY AND IMPORTANCE :

COLLABORATIVE FILTERING TECHNIQUE:

The collaborative filtering (CF) algorithm is one of the most successful techniques among all of the filtering techniques available for the recommendation system . CF is a domain-independent prediction technique for analyzing hard-to-describe content by observing metadata . This filtering technique is formed by using a dataset of the preferences of a group of users to make a recommendation to another group of users who show similar types of behavior. The fundamental assumption of CF is based on the similarities of users, which build a neighborhood group. Therefore, this technique is called user-based collaborative filtering.

MODEL BASED COLLABORATIVE FILTERING TECHNIQUE:

The model-based CF algorithm works by constructing a model for the prediction of ratings on the unseen items of users based on the past ratings of the users . Machine learning or data mining approaches can be used to build the model-based CF technique. To do so, this model may categorize users into single or multiple clusters. However, single cluster categorization is often problematic for prediction or recommendation as the user may have a variation of tastes with the different items . Therefore, most of the model-based CF algorithms categorize the user into multiple clusters . With the evolution of the use of learning algorithms, model-based recommendation systems have begun to use some algorithms such as association rules, clustering, decision tree, artificial neural network, link analysis, regression and Bayesian classifiers.

## HYBRID FILTERING TECHNIQUE:

The hybrid filtering (HF) technique combines multiple recommendation techniques to achieve better system optimization and avoid different limitations and challenges of a basic recommendation system. The concept behind implementing the hybrid technique is that the combination of algorithms would provide more appropriate and effective recommendations to users than a single algorithm. Hence, this is the disadvantage of using one algorithm-based recommendation system. This construction is beneficial when the dataset lacks user preferences; information about such preferences builds the foundation of collaborative recommendations. By assuming the result of content-based filtering (R1) and result of collaborative filtering (R2), the hybrid filtering technique calculates the weights of these results as R3 and then, depending on the weights, it combines the results by influencing the higher weighted result and recommends the final product R4, which resembles the results R1 and R2,