Group Number: _ _ _ _SE-S2-WE-11 _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Name of research paper 1:   _ _ _ _ Sales Optimization Solution for Fashion Retail_ _ _ _ _ _

Limitations of research paper 1:

- Limited Data Scope: The research paper seems to use limited datasets. For example, the sales forecasting component uses data from only one platform (Wish) and only for summer fashion products.
- Timeframe: The data seems to be from July 2020 which may not be valid for long-term trends or seasonality.
- Focus: The study is mainly focused on women's clothing
- Limited real-world testing: There is no mention of testing these models in a real retail environment
- Lack of comparison: The paper doesn't extensively compare these methods with other existing solutions in industry

Improvements or extensions suggested to research paper 1:

- Expand Data Scope: Incorporate data from multiple retail platforms to make the model more robust.
- Include more product categories: Extend the analysis to men's clothing, accessories and other fashion segments.
- Incorporate external factors: Include external factors such as economic indicators, weather and social media trends that might influence fashion.
- Add a recommendation system: Implement a product recommendation system based on the customer segmentation and demand analysis.
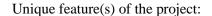
Proposed project topic: _ _ _ _Fashion Product Recommendation Engine for Fashion Retail _ _ _ _ _ _

How the identified improvements or extensions will be addressed by the project:

- Fashion is volatile and highly influenced by seasonal trends. Traditional recommendation systems may not fully capture these dynamic changes in customer preferences. So, our system will incorporate seasonal trends by analyzing data from various fashion sources, including social media, and seasonal sales data. Moreover, we will enhance our recommendation system by integrating user's search history.

- This allows the system to personalize recommendations based on individual user preferences. As an example, if a user frequently searches belongs to summer clothing category, the system will prioritize such items in trends for future recommendations.

Unique feature(s) of the project:

- Recommendation system: Implement a product recommendation system based on the customer search history and seasonal trend awareness.

Functions of member 1 – Sandeepa K.B.A.R. IT21809088

Order Management
- CRUD Operations – Create, list, edit and delete orders
- Payment gateway
- Report generation

Functions of member 2 – Weerasinghe C.D. IT19211688

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ML model

- Train, collect & prepare data for the model to predict which products users are most likely to interact with based on their search history, current season and fashion trends.

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Functions of member 3 – Dias D.D.K.S. IT21220760

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Inventory Management

- CRUD Operations – Add, list, edit and delete products
- Report generation

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Functions of member 4 – Wickramasinghe S.S.Y. IT21816086

 User Management

- CRUD Operations – Add, list, edit and delete users

- Report generation