What do we want?

Fashion Trend Intelligence system. A Recommender system to predict **current** and **upcoming** Fashion Trends.

What is a Fashion Trend Intelligence System?

It is the act of predicting fashion trends including colors, fabrics, silhouettes, patterns, styles, and more for clothing collections for the upcoming seasons.

Context

A brand X has to launch a new collection for Spring Summer'24 in the Women Tops and Dresses Category.

The steps followed by the Design team of that brand in order to create a new collection are as follows

1. Every Brand has their competitor brand or Aspirational Brands. Like for V-Mart/Myntra/Flipkart it can be Zara, H&M, Forever 21. So the design team scans through the website of their Aspirational/Competitor brands to see what is selling well, which has more consumer acceptance, which Color/print/Style/Fabric is more predominant on their websites.

2. Then the design team looks at the WGSN report. WGSN is a fashion forecasting firm which detects fashion attribute information from images all around the world (fashion shows, visual merchandising, blogs, streets, Catwalk, Influencers' posts which are the origin point of any fashion trend). They examine the information through experiences, observations, media scans, interviews, and exposure to new places. Such information analyzing process is known as abstracting: it recognizes similarities or differences across all the garments and collections. Fashion forecasters abstract information across design collections and time intervals to identify changes in fashion trends. Analyzing image-based fashion attributes usually is time consuming and labor intensive, even for professionals. For instance, WGSN employs around 150-200 forecasters to analyze the trends.

3. Now, after analysing all this information, the design team creates new styles and prints and prepares a new launch collection.
4. If there is a local brand Y who follows brand X (assume a Mid Premium Brand). Once the collection is out in the market, brand Y's design team will see Brand X Images and will tweak prints and style to launch a new collection.
5. This is how the trend flows: Catwalk/Fashion Show/Celebrity Walk/Influencers -> Premium Brand (Gucci, Zara) -> Mid-Sized Brands -> Small brand

Task

Design a Fashion Trend Intelligence System to help the design team of Brand X and Y for Women Tops & Dresses Category.

Methodology

1. Scrape images (tops/dresses) from influencer's instagram(public accounts with more than 30k followers) posts. Number of accounts- 50 Domestic, 50 International.
   Data- Model Image, model followers number, Post Date, any hashtags used.

2. Scrape one competitor's website data in tops and Dresses Category- For this assignment you can take Myntra's website. **(200 Images)**
   Data- Product image, price, product description, product detail, specifications, rating, number of rating.

3. Explain Computer Vision, AI Algorithm and Framework that you will use to classify images and subsequently to assign popularity of each Image and hence identify trends in terms of style, color and Print.

Eg. A-line, half sleeve, knee length Dress is a style category.

Color- Blue White
Print- Abstract

Desired Output:
Style Popular(Label), Image, Popularity Score, Source of image
Color Popular(Label), Image, Popularity Score, Source of image
Print Popular(Label), Image, Popularity Score, Source of image

Sources to refer: Heuritech website

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