

Dash Application Report

Overall Summary

Myntra is discovered to be India's e-commerce company sector for fashion, footwears, accessories, beauty products accessible to anyone with personalized shopping experience. We involve with creating solutions to unresolved problems that helps the world be a happier and more stable environment in terms of India's online marketplace experience.

With the mentioned above, I have developed to build the dashboard using Plotly Dash. Using these Dash apps enables models in python to have that user friendly experience that goes beyond the ordinary of just a mere dashboard. This widens the horizon of what can be accomplished allowing from various fields to business decision makers.

This dashboard will delve into insights from the Myntra dataset at different levels of both the product and seller. This dashboard will also help one to identify various key performance indicators (KPIs) like the top-rated brand, best rated product category, highest rating product, etc. At the level of the seller, identification of cities where most sellers are located, Indian state with highest sellers present, etc.

The dashboard will also explain some features like the discounted price and average marked price for various product categories, relation between number of ratings and ratings using plots.

The target audience I would feel interested for this dashboard goes to those of interest in the e-commerce fashion and lifestyle sector.

Data Source

Regards the raw dataset, it was initially with rows of 24324 and columns of 17. Some features in the dataset were brand_name, tags, rating, rating_count, marked_price, product_tag, etc. Some redundant columns were also observed

like meta_keyword, meta_description, img_link, product_link, etc which was treated and removed from the data cleaning process.

Using keywords in 'tags' column, a new column called 'suitable_for' was created. Using seller_address column, pincode was extracted into new column 'pincode'. A csv file containing list of Indian pincodes with cities and state names was merged with our original dataset to get 'cities' name using pincodes.

The cleaned dataset had leftover of 24324 rows and 15 columns. Exporting was further done to a new csv file named, ""myntra_cleaned.csv" which was then explored for data visualization.

- Raw Dataset: myntra_products.csv
- Dataset containing Indian pincodes: Indian_pincodes.csv
- Cleaned dataset: myntra_cleaned.csv

Data Visualization

To start with, the dashboard has been built on the framework of Plotly Dash. The source data was cleaned and pre-processed with python using Jupyter notebook. The cleaned data was further used to build plots in Plotly. The plots created were then used to build the Dash app using dash components.

The dash app consists of three pages, namely: Home page, Products page and Seller page.

- The home page details full information of about Myntra company. Here, one can navigate to their website, Wikipedia page, Twitter handle from the button links provided.
- The products page provides KPIs related to products listed in the dataset and plots related to product tags, ratings, marked price, discounted price etc. The plots can be interacted with using dropdown and checkboxes.
- The seller page contains couple of KPIs related to sellers. Embedded in this, is a choropleth graph created to visualize the density of sellers in various Indian states. Also, a bar chart and tree map developed to give insights of seller state, city and product categories.

Attached Files:

- **CA2- Dami.ipynb:** Jupyter Notebook (executable document to perform data analysis)
- **index.py:** Main python file executed to run the Dash app
- **app.py:** Application file
- **home.py:** Python file which contain the home page layout, seen in the apps folder
- **products.py:** Python file containing products page layout, available in the apps folder
- **seller.py:** Python file which contain seller page layout, seen in the apps folder
- **assets:** Folder which contain all images used in the dash app.

Information

- RENDER link: <https://myntra-nkop.onrender.com>
- GITHUB link: <https://github.com/Damistar05/damiCA.git>
- Indian Pincode DataSet: <https://data.gov.in/resource/all-india-pincode-directory-till-last-month>