The Footwear Factory

"Buy low, sell high"

Sneakers are a type of shoe primarily designed for sports or other forms of physical exercises, but they are now widely being used for everyday casual wear as well. The demand for them in the market is higher compared to their availability, thus increasing the price in the aftermarket.

Lately, this has become a very competitive business and in order to survive and increase revenue it is important to analyze and manage the system in a better way. The goal is to build a database for a sneaker reselling platform that helps users buy and sell, thus keeping track of the revenue flow and reports regarding the systematic growth. The software will be available to buyers as well as sellers.

There are two ways to build our inventory:

- Cop the sneaker manually for retail via Nike, JD Sports, Finish Line store.
- Buy low(from small scale resellers) and sell high.

Profit = (Resale price - Retail Price) * 100 / Retail Price

Our stakeholders:

- **Primary buyer** user looking to purchase sneakers from the listed products on the application.
- **Vendors** groups of small scale resellers from where the stocks are procured at a certain price to be resold.
- **Resellers** users looking to sell sneakers owned by them by mentioning the conditions and quoting an initial sell price.
- **Retailers** major companies or players in the sneaker field that produce factory products.

The system focuses on two main aspects:

1. Buying Sneakers

- Sneaker collection currently available to purchase.
- Generated reports can be used to decide the required lots of sneakers to be added to the store.

2. Selling Sneakers

- Keeping track of selling sneaker conditions (new, used and deadstock i.e. shoes no longer available in market but has demand)
- Generate report regarding the highest sold sneakers to identify and procure more hyped collections(extravagant publicity around the item).
- Based on the generated reports come up with strategies to increase the sales of the dead stock and in turn increase the revenue for the next quarter.

Functionalities:

- 1. Users would be able to login into the application as a buyer or a seller.
- 2. The buyer can check for the list of all available sneaker collections.
- 3. The seller can compare existing price lists to quote similar price ranges on the selling product.
- 4. The business owner can retrieve the reports based on various constraints.

Data to be captured for your business:

There will be following tables in our database:

- Shoe Details
- Stock Availability
- User Profile Details
- Login Details
- Sold Data
- Seller Data

Shoe Details

This table will include data related to all the available shoes in the market:

- SKU Number(*primary key*), model name, color, year of manufacture, retail price

Stock Availability

This table will include data related to all the available stocks:

- SKU Number(primary key), size, available quantity

User Profile Details:

This table will hold details about the user:

User_id(auto-generated), name(composite attribute), date of birth, age(derived attribute on the basis of age), email-id, shoe size, address(composite multiple attribute)- {(type, apt no, street, city, state, zip code)}, payment method

Login Details:

This table will contain only the username and encrypted password which will help the user to login every session and proceed with further transactions.

Sold Data:

This table will contain data related to all the stocks sold and will help in generating the reports:

- SKU number(primary key), shoe size, resale price, quantity, date of sell

Seller Data:

This table will contain the data of the vendors we procure our stocks from:

-SKU number(*primary key*), vendor_name, model_name, shoe size, listing price, quantity

Business Goals or Functional Requirements:

- 1. The business owner can generate reports on the growth in sales and profit on a quarterly basis.
- 2. Identify the highest moving SKU (Stock Keeping Unit) to make sure that the supply requirements are met.
- 3. Generate reports on the slower moving stock, thus helping push this product more to avoid having SLOB (Slow moving or obsolete) stock.
- 4. Identify which vendor has the maximum sales in revenue to strike better deals in the upcoming quarter.
- 5. Identify the time when the maximum sales in revenue occurs to improve procurement of stocks accordingly.
- 6. Identify the time when the lowest sales in revenue occurs to avoid hoarding stocks that might cause inventory issues.
- 7. Identify different sneakers that fall under the 'hype' category (limited availability, high demand), thus helping in getting higher profits on individual transactions.
- 8. Identify the targeted age group based on the purchase history and user profile to improve on the product procurement accordingly.

Team Information:

- Dhanush Raj
 1002073155
 dxr3155@mavs.uta.edu
- Prajakta More 1001924287 pbm4287@mavs.uta.edu
- Arvind Raman1002050501axr0501@mavs.uta.edu