



Jar – Business Analyst Assignment

Kanika Varandani



**Excess the entire
Python Notebook:
[Here](#)**





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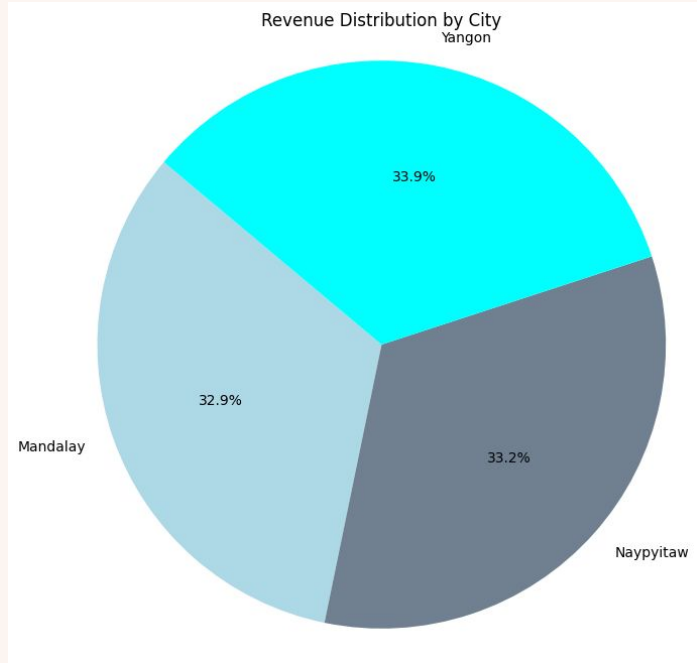
01

Walmart Sales Analysis

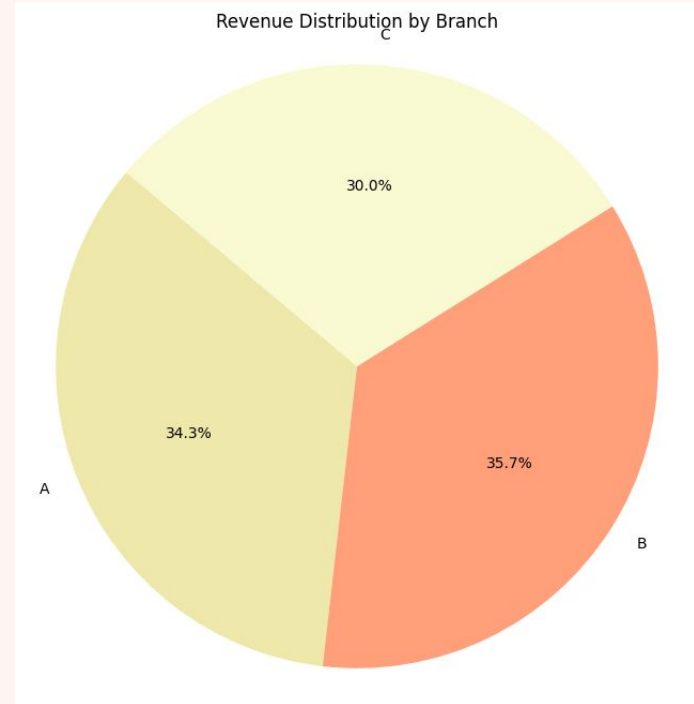
Shocking Revelations in the Sales pattern and
the Ratings Relations with the Revenue
Generation!

Task: 01

Performance of sales and revenue at the city and branch level



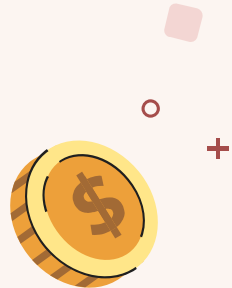
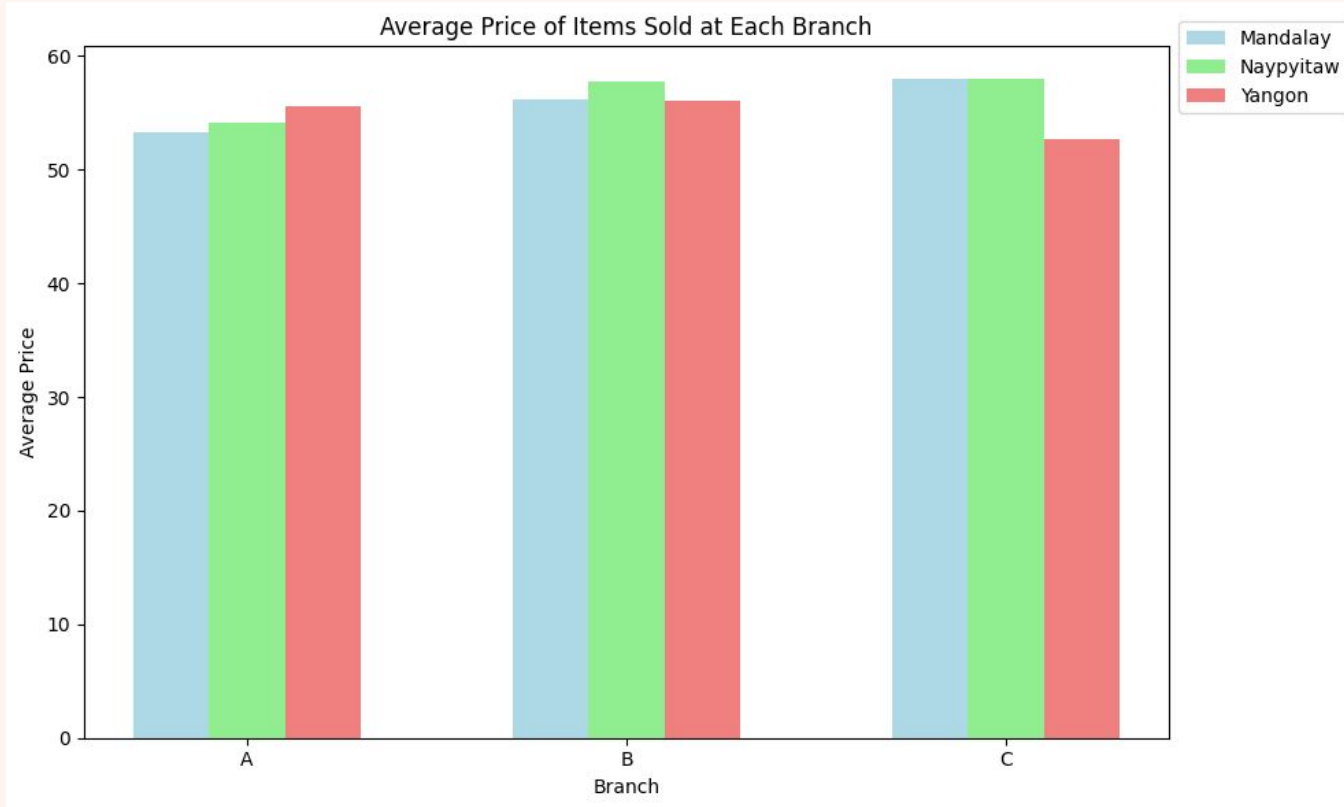
Yangon Generating Highest Revenue : 33.9%



Branch B generating the highest Revenue: 35.7%

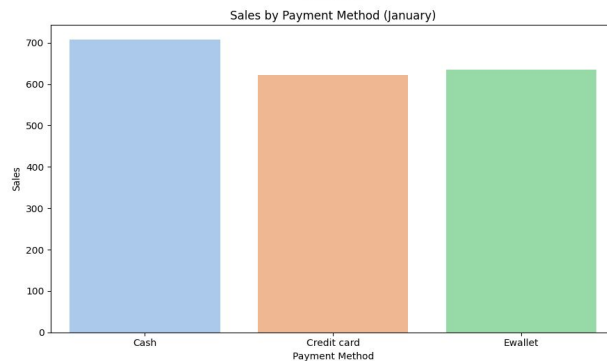
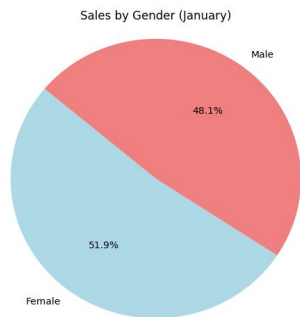
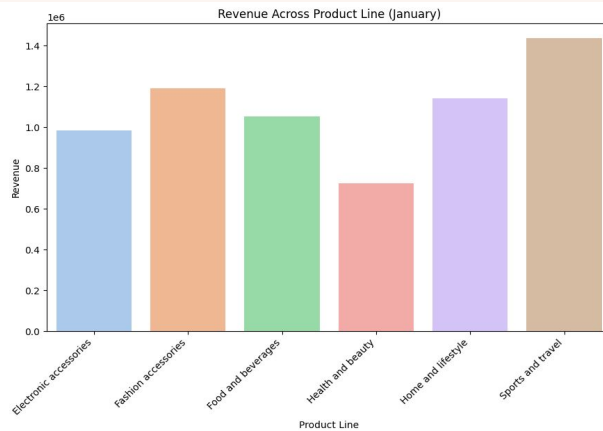
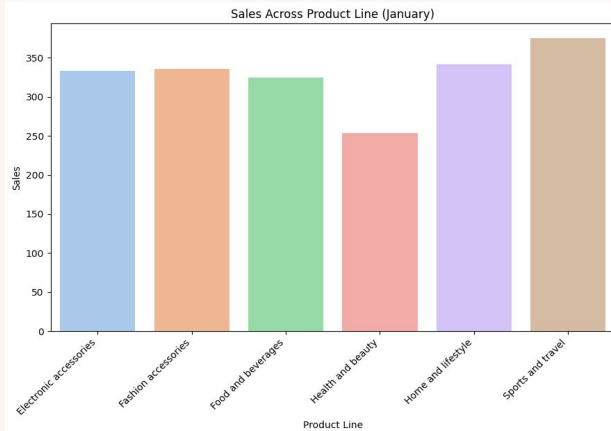
Task: 02

Average price of an item sold at each branch of the city



Task: 03

Analyzing Performance Month - Wise : **January**

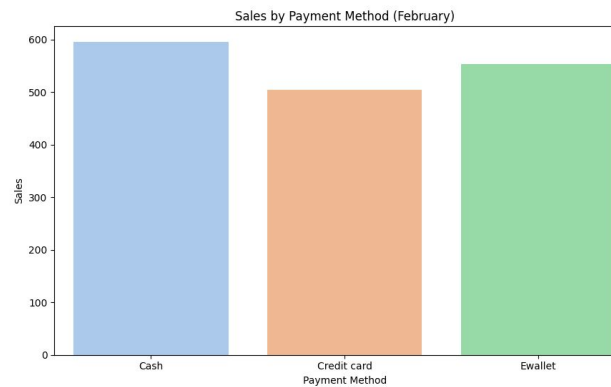
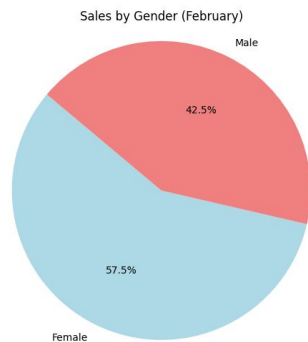
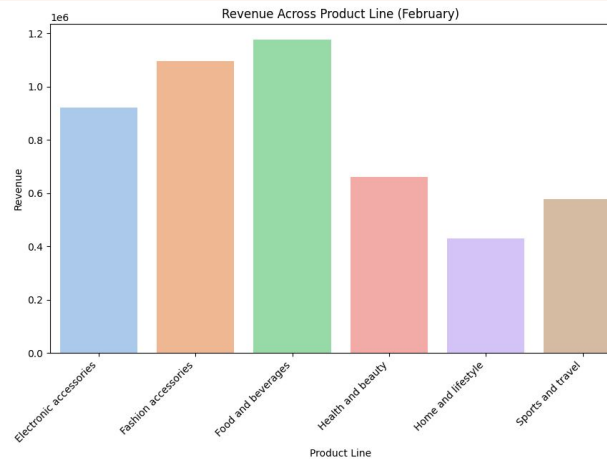
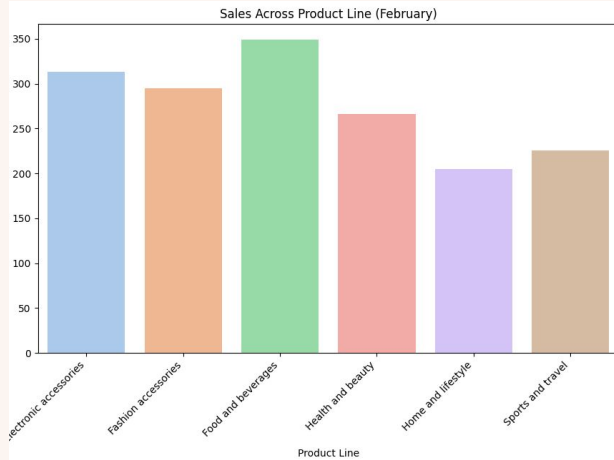


- Highest Sales Across Product Line : **Sports and Travel**
- Highest Revenue across Product Line: **Sports and travel**
- Gender comparison isn't vivid, but **Female dominating Males** by small margin
- Maximum used mode of Payment : **Cash**



Task: 03

Analyzing Performance Month - Wise : February



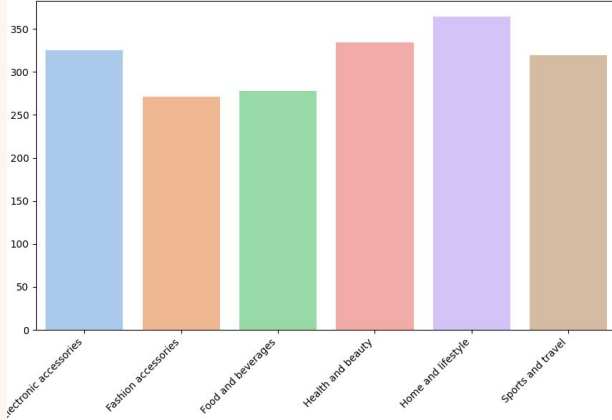
- Highest Sales Across Product Line : **Food & Beverages.**
- Highest Revenue across Product Line: **Food & Beverages**
- Gender : **Female dominating - 57.5%**
- Maximum used mode of Payment : **Cash**



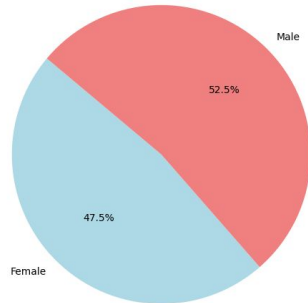
Task: 03

Analyzing Performance Month - Wise : March

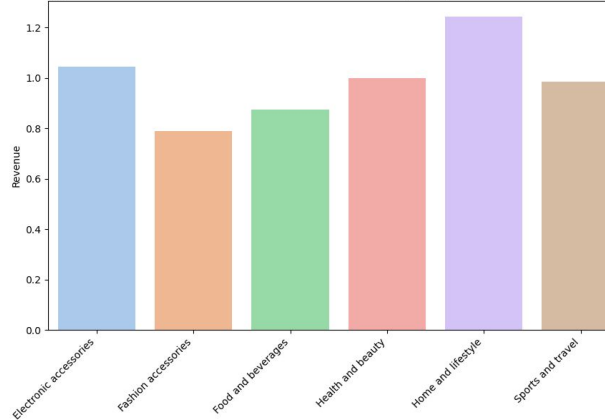
Sales Across Product Line (March)



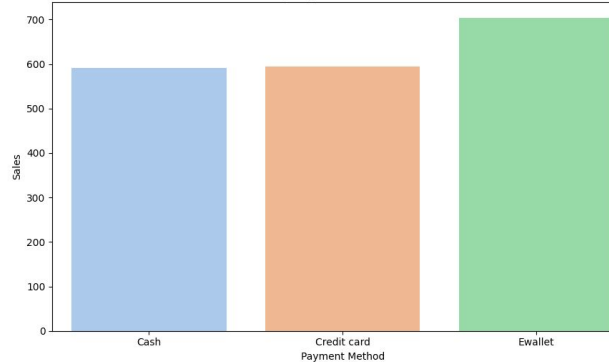
Sales by Gender (March)



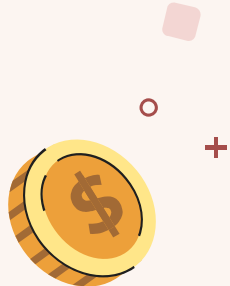
Revenue Across Product Line (March)



Sales by Payment Method (March)



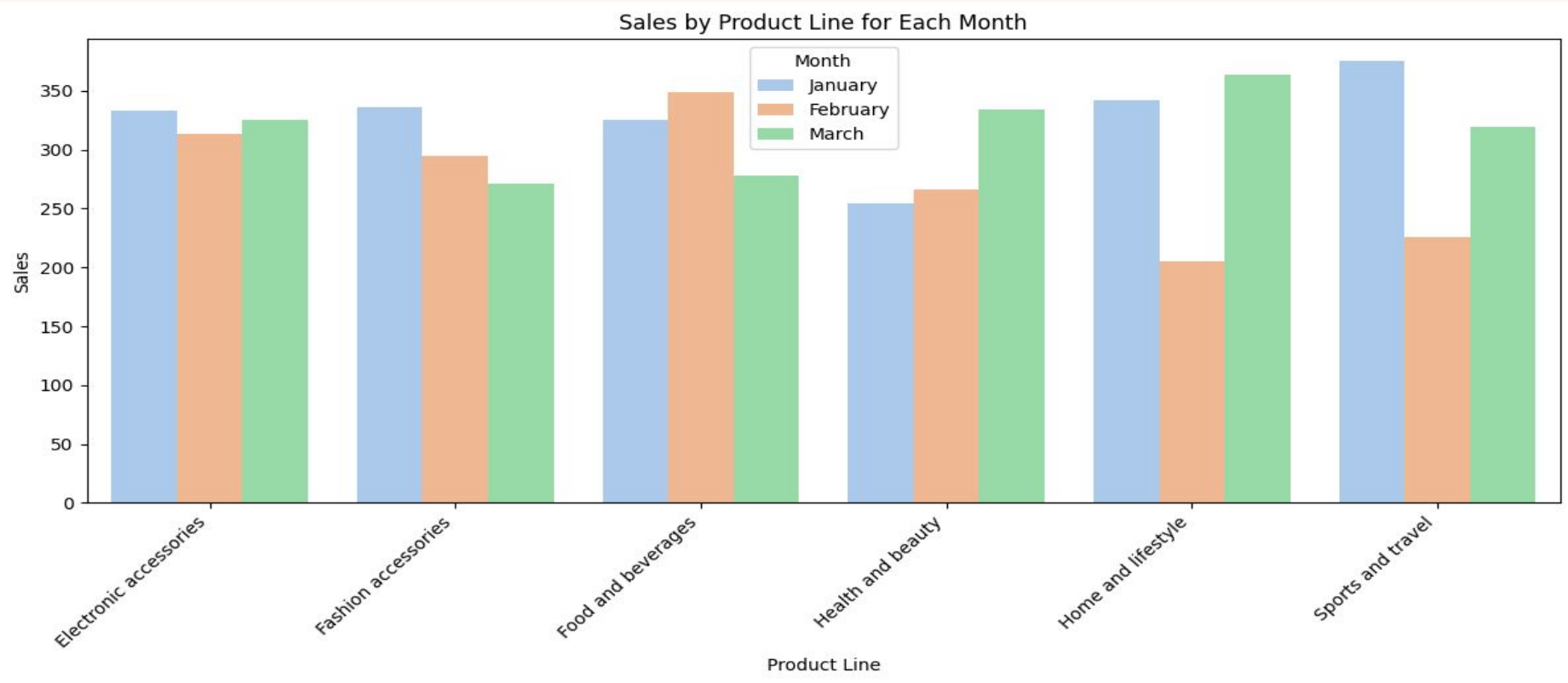
- Highest Sales Across Product Line : **Home & Lifestyle**
- Highest Revenue across Product Line: **Home & Lifestyle**
- Gender : **Male**
- Maximum used mode of Payment : **EWallet**



Sales by Product Line for each Month

- Gradual **Decrease** in Sales: **Fashion accessories**
- Gradual **Increase** in sales: **Health and Beauty**

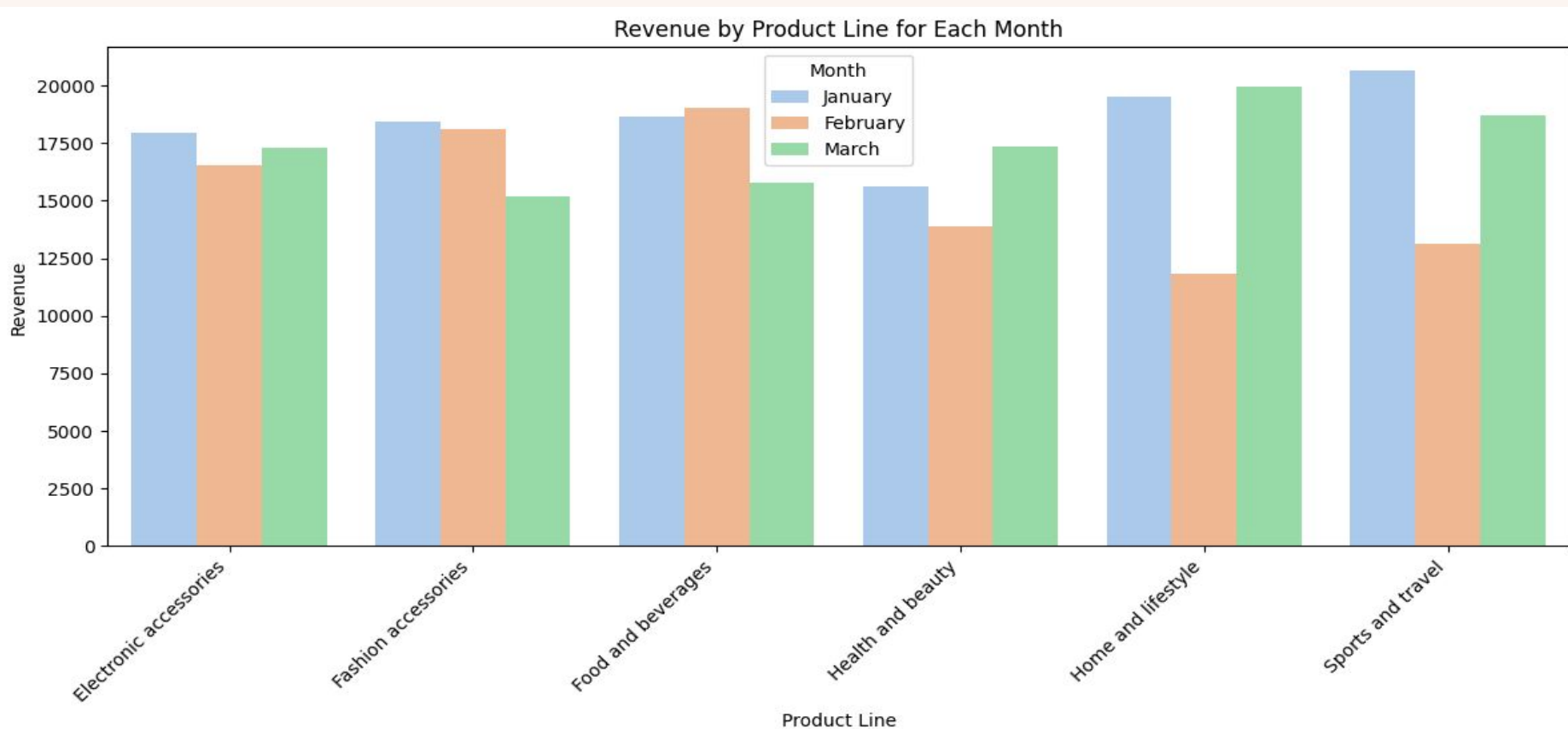
- Great Fall with high Increase: **Home and Lifestyle**
- Great Fall with high Increase: **Sports and Travel**



Revenue by Product Line for each Month

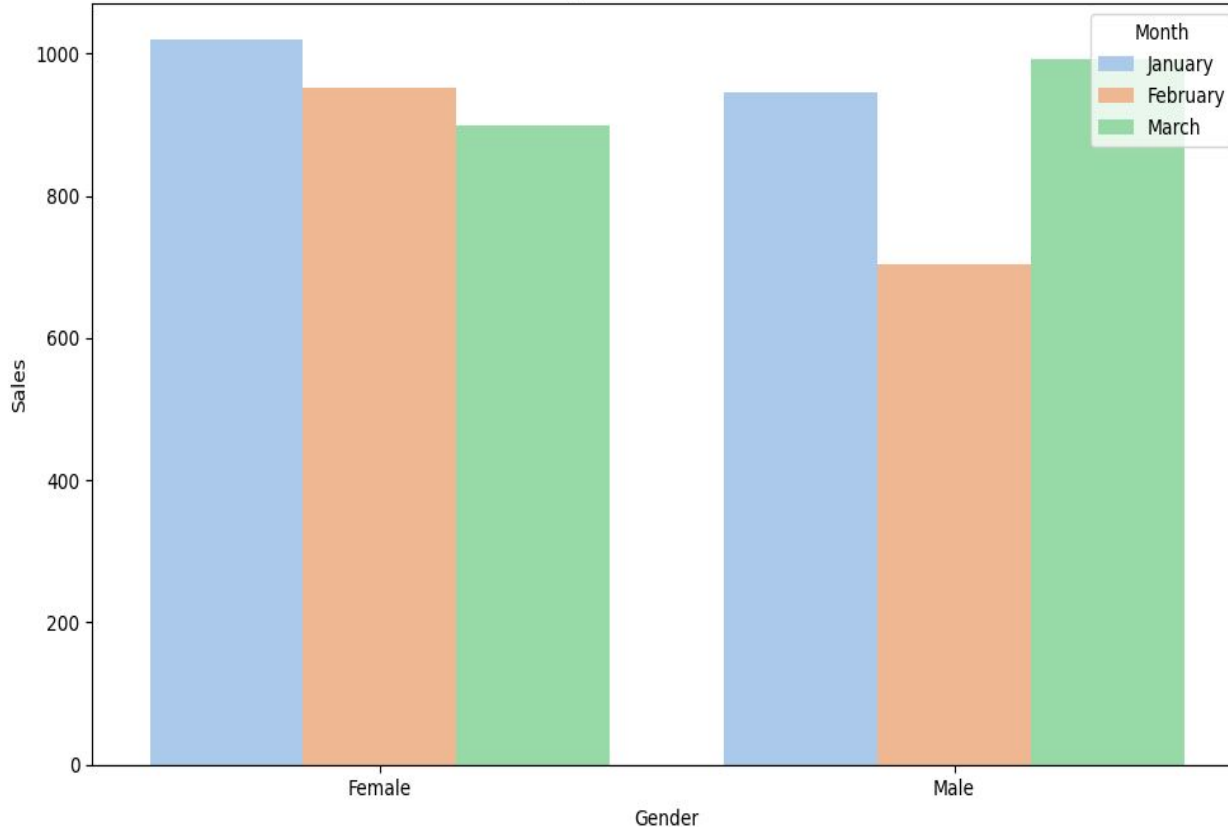
- Gradual **Decrease** in Sales: **Fashion accessories & Food and Beverages**
- Gradual **Increase** in sales: **Health and Beauty**

- Great Fall with high Increase: **Home and Lifestyle**
- Great Fall with high Increase: **Sports and Travel**



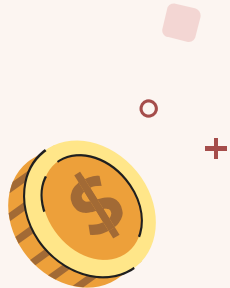
Gender Affecting Sales

Sales by Gender for Each Month

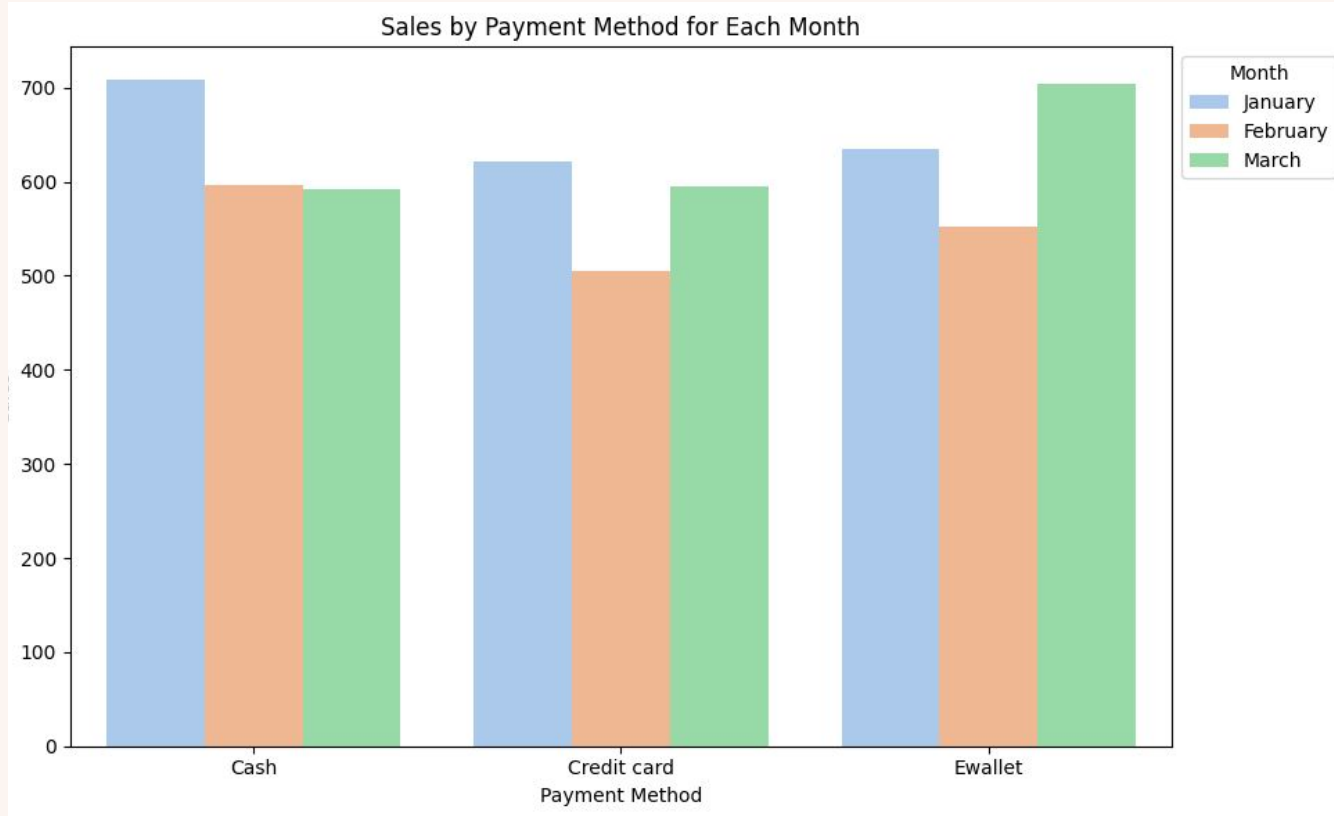


- Gradual decrease in **Female buyers.** (**Alarming!**)
- Huge Fall and Jump is witnessed in **Male Buyers** (**Inconsistency**)

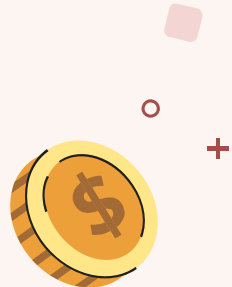
Note: Same effect on Revenue.



Effects of Sales & Revenue on Payment Methods

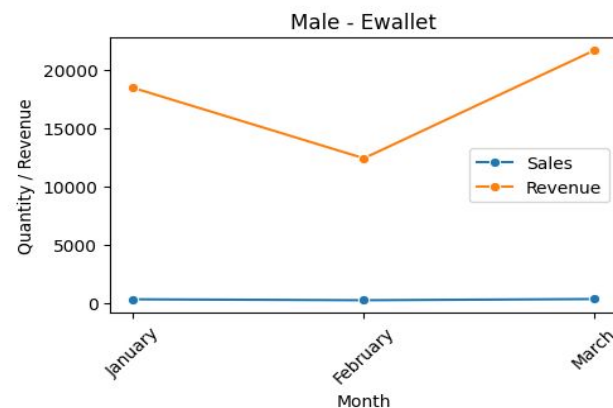
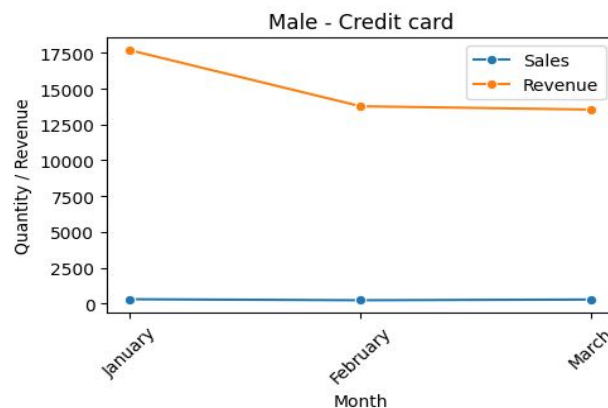
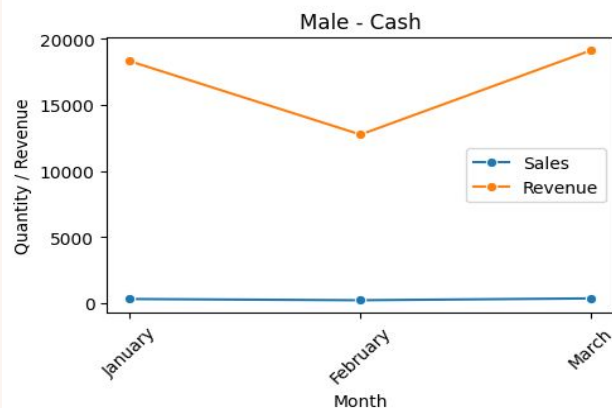
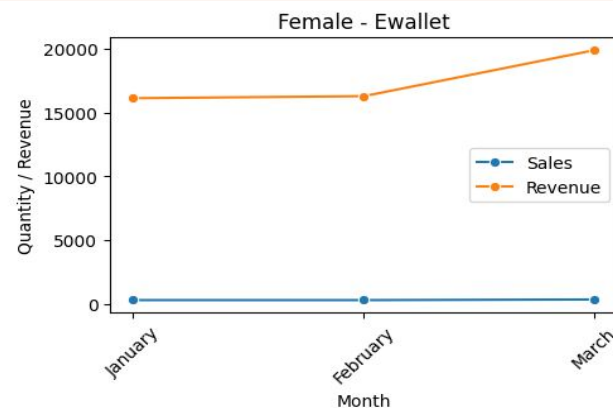
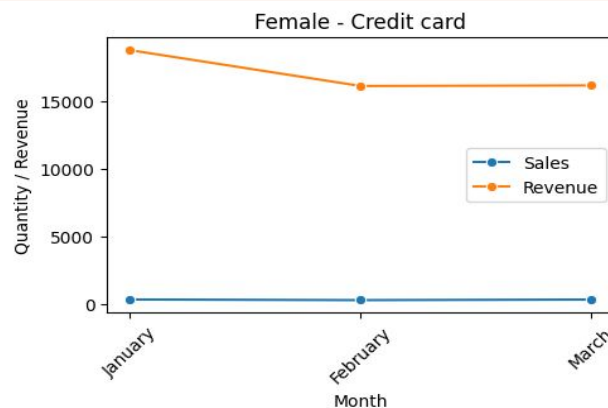
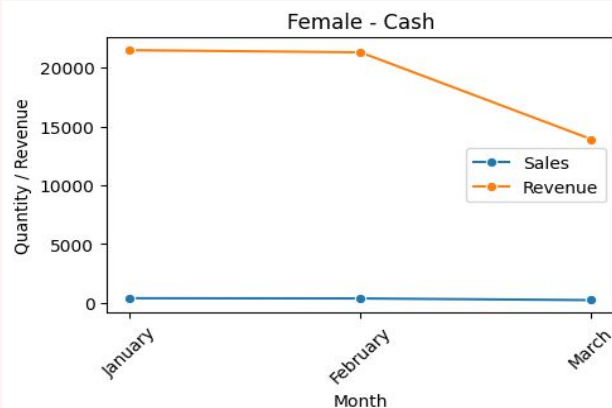


- **Decrease** in **Cash** users.
- Fall and rise in **Credit Card** users.
- **Increase** in **Ewallet** users.



Best Combination - Highest Revenue

Females - Ewallet



More Analysis

Customer Preferences: Female users buys Electronic products Extensively.

Ratings: Products with Highest Ratings are : Food and Beverages

Ratings: Products with Ratings <5 : Home & Lifestyle.(Alarming!)

Timing Preferences: Major purchases are witnessed from both the genders after-noon.

Highest number of products ordered from Mandalay, Naypyitaw, Yangon are Fashion accessories, Sports and travel, Food and beverages and Home and lifestyle Respectively.

But the Shocking Revelation is that the Product line with highest sales is Electronic Accessories but it not the most ordered from any of the cities!!



App Exploration

One aspect of the Jar app that could be significantly improved is its **Budgeting feature**. While the app offers basic budgeting functionalities, it could benefit from incorporating **advanced AI algorithms** to provide more personalized and actionable insights.

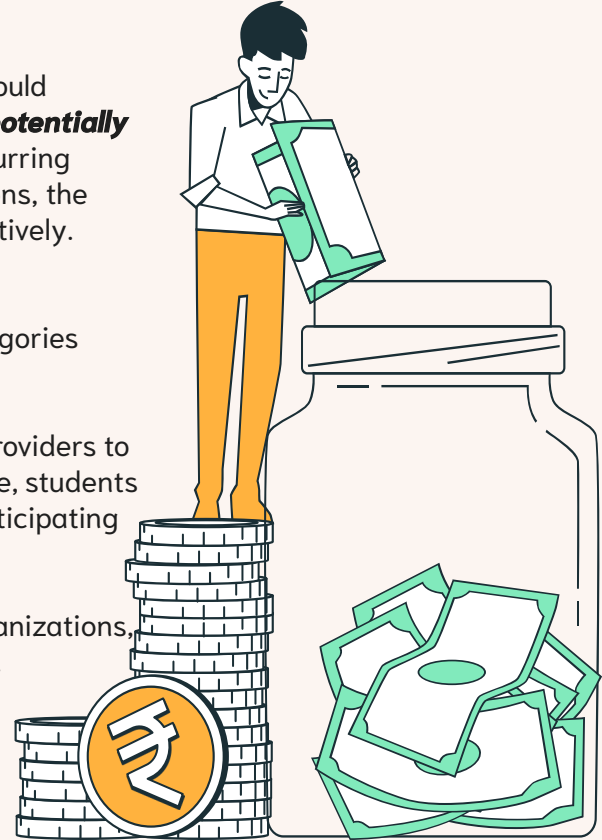
For example, instead of simply categorizing expenses based on predetermined labels, the app could analyze users' spending patterns over time and **automatically identify areas where they can potentially save money**. This could include suggestions such as switching to lower-cost alternatives for recurring expenses or negotiating better deals on subscriptions. By offering more tailored recommendations, the app can help users make smarter financial decisions and achieve their savings goals more effectively.

Let's make the Jar app more **students oriented**,

1. **Student-Centric Budgeting Templates:** Pre-designed budgeting templates could include categories such as textbooks, tuition fees, rent, groceries, entertainment, and student loan payments.

2. **Student Discounts and Offers:** Partner with student-focused brands, retailers, and service providers to offer exclusive discounts, deals, or cashback rewards for students using the Jar app. For example, students could earn extra rewards or spins on the '**Spin to Win**' feature when they make purchases at participating merchants or use specific student-oriented discount codes.

4. **Campus Events and Partnerships:** Forge partnerships with universities, colleges, student organizations, and campus events to promote the Jar app as a valuable resource for student financial wellness.



Product Optimisation

The 'Spin to Win' feature:

1. **Augmented Reality (AR) Spins:** Implement AR technology to enhance the spinning experience. Users could virtually spin a 3D wheel overlaid on their surroundings using their phone's camera. This immersive and interactive experience would make spinning the wheel feel more fun and engaging,
2. **Time-Based Multipliers:** Introduce time-based multipliers that increase the value of rewards based on when users spin the wheel. For example, spinning during off-peak hours could result in higher chances of winning rare prizes or larger bonuses.
3. **Collaborative Spins:** Enable users to team up with friends or other app users to collectively spin the wheel and earn shared rewards. This collaborative feature could involve pooling spins or combining efforts to unlock exclusive prizes or bonuses.
4. **Customizable Wheels:** Allow users to customize their spinning experience by choosing from a variety of themed wheels or designing their own. For example, users could select a wheel based on their interests or preferences, such as travel destinations, favorite hobbies, or financial goals. Customizable wheels add a personal touch to the spinning game, making it more appealing and relevant to individual users.

This way 'Spin to Win' feature can capture the interest of a wider audience!





Thanks!

I thoroughly enjoyed working on this
assessment, looking forward to hearing
from you soon!

kanikavarandani2002@gmail.com

+91-8690054481

[LinkedIn](#)

