Prototype Documentation

Group Name: Underachievers

Group Members:

1. Ong Zheng He
2. Ho Hoong Khuan
3. Soong Tze Yeng
4. Jason Tang Kwong Wee
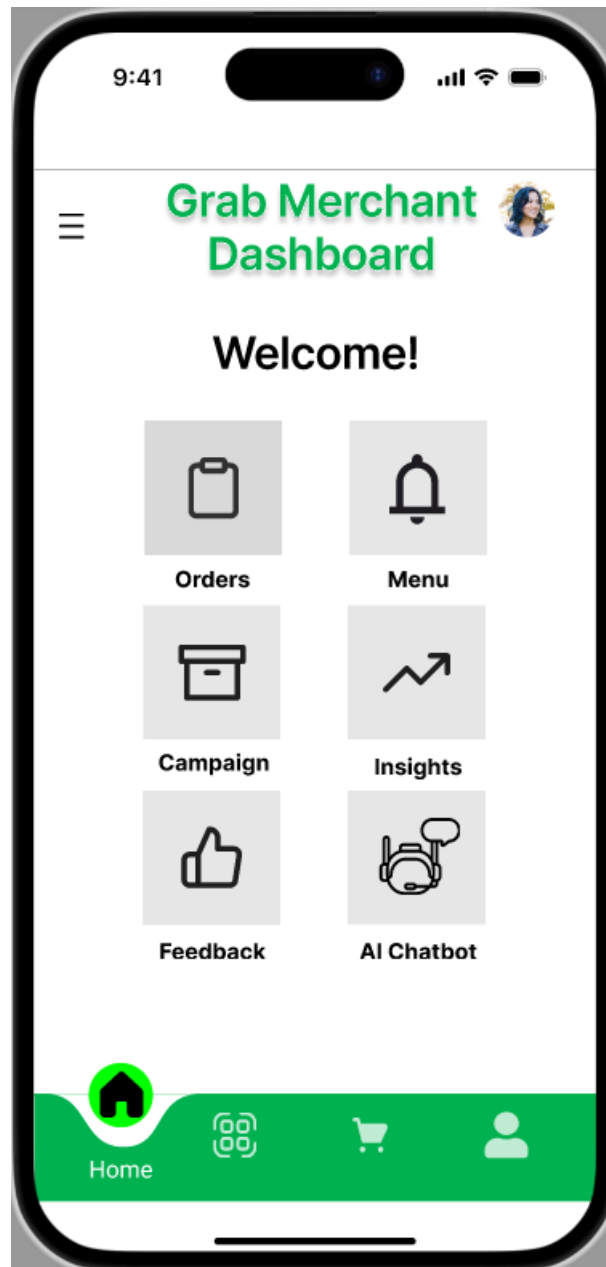5. Lee Tong Hua
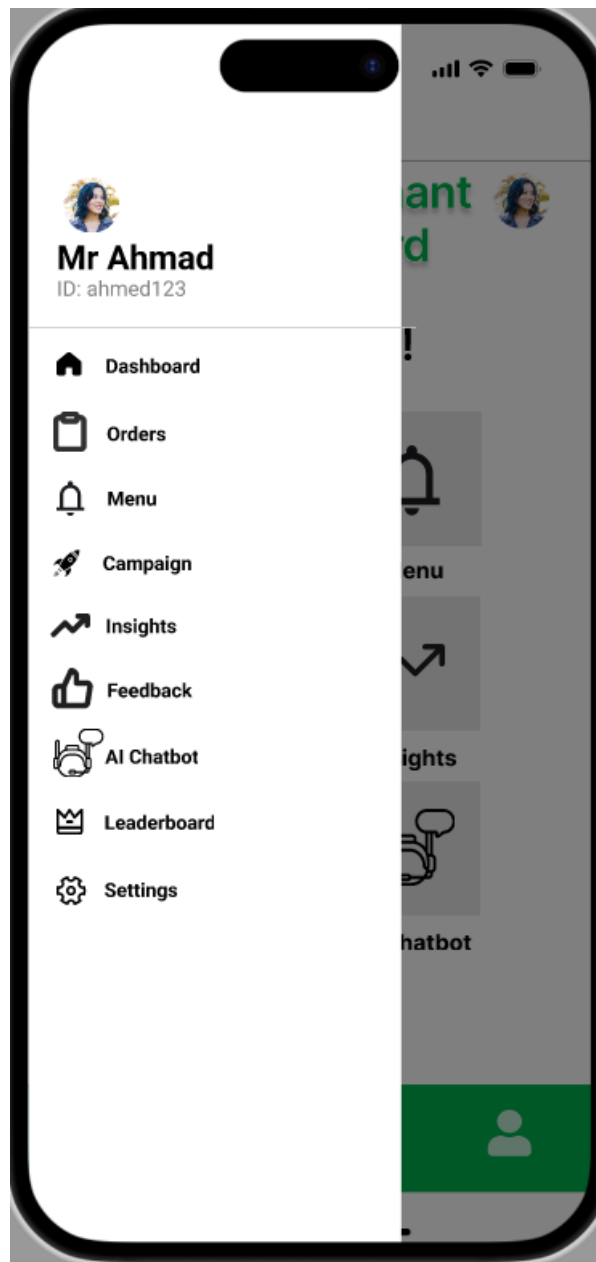
Contents

Prototype Concept

This documentation only covers specific parts of the prototype which are assisted by AI in concept.
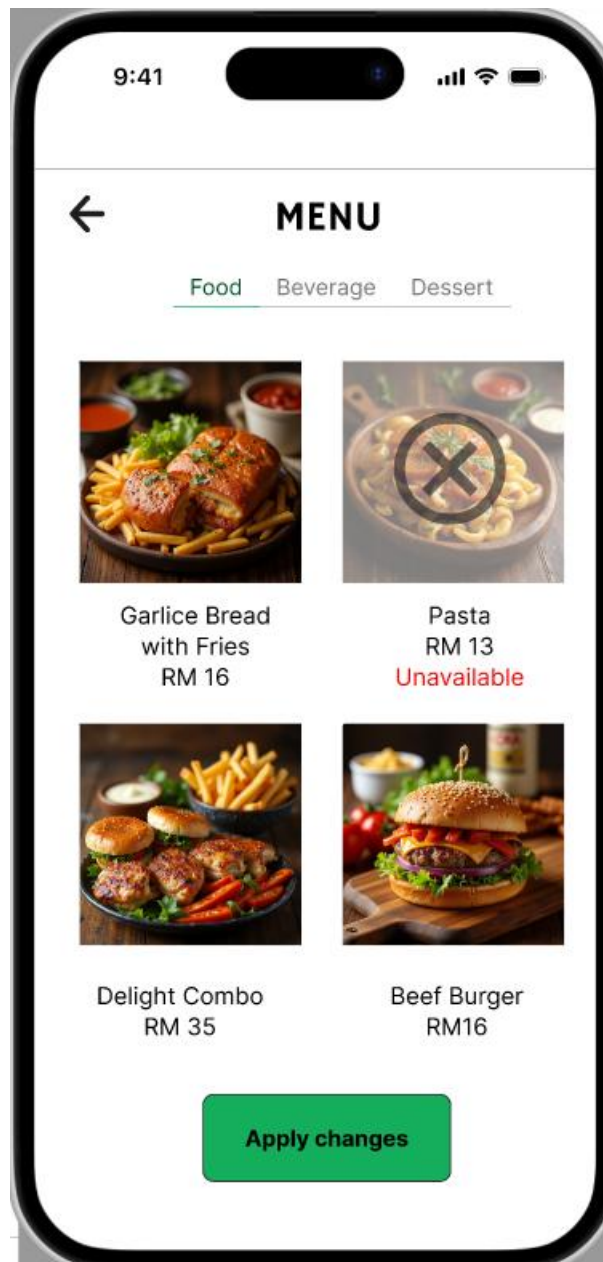
Landing Page

The landing page consists of buttons to navigate to major features of the application.

Navigation Sidebar

The navigation sidebar consists of all the different pages the merchant can navigate to.

Menu

The menu lists the different types of food the merchant's restaurant has to offer. The AI assistant keeps track of the food ordered and the deducts the ingredients used based on the inventory status. Food items with insufficient ingredients to make are disabled to avoid incorrect orders from the customer's side.

Promotions & Campaigns
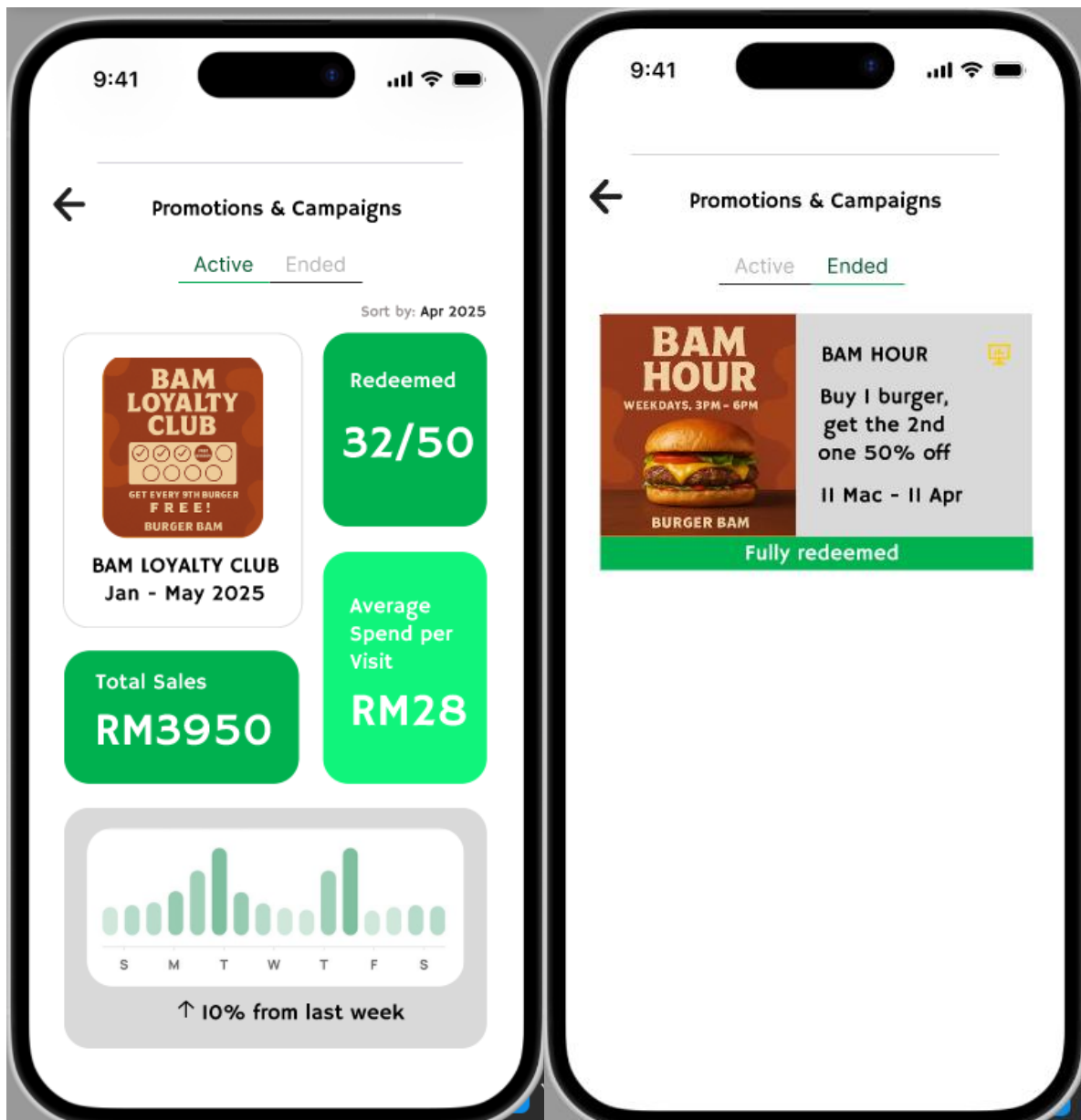
The promotions and campaigns page displays the current active and ended promotions or campaigns organized by the merchant's restaurant.
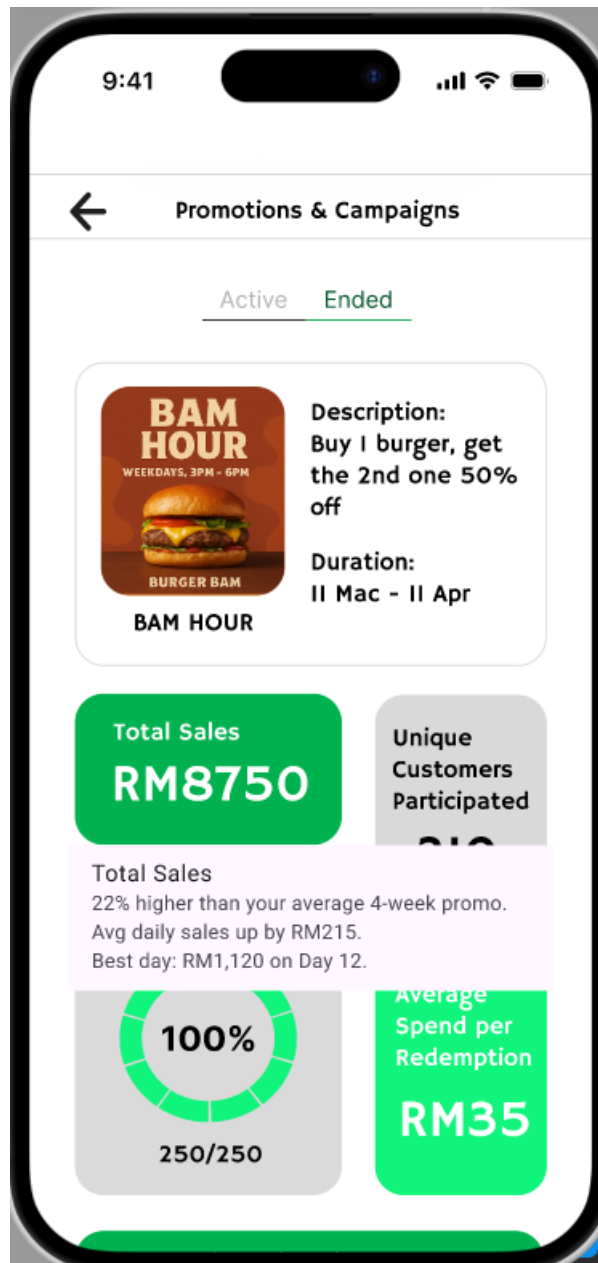
In the ended campaigns sections, clicking on an ended campaign allows the merchant to see the insights and outcomes of the campaign, such as its total sales, participants and so on. AI generated insights will be shown after clicking on the insight boxes to provide a more in-depth understanding of the results, highlighting potential opportunities for improvement for future events.

Business Insights
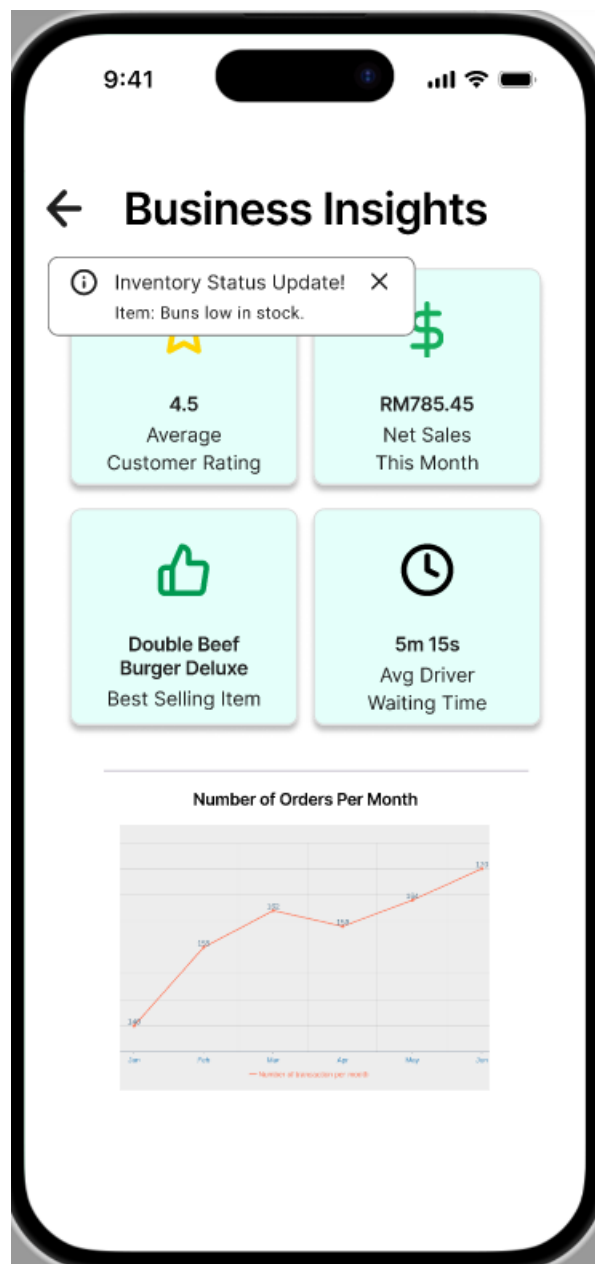
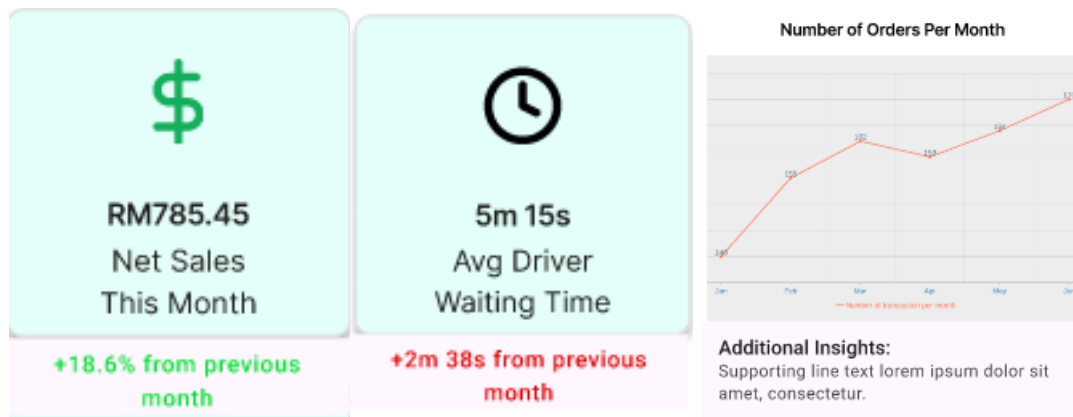The business insights page is assisted by AI to provide the merchant on the important matters or insights requiring the merchant's attention. The analytics and insights is provided in real-time as the merchant's business is ongoing. For example, an alert will be displayed when an item is low in stock.

Number of Orders Per Month

Additional Insights:
Supporting line text lorem ipsum dolor sit amet, consectetur.

RM785.45
Net Sales
This Month

+18.6% from previous month

5m 15s
Avg Driver
Waiting Time

+2m 38s from previous month

Clicking on different insights or graphs displays additional information or insights generated by the AI after analyzing the sales data. These additional information can include diagnostic, descriptive, predictive and prescriptive analytics to assist the merchant in actions to be taken.

Leaderboard (Actionable Recommendations)

The leaderboard page shows an AI generated leaderboard of other merchants around the merchant's area. The AI can provide information about the current market trends and provide tailored competitive insights to gain an advantage over other merchants, such as analyzing the reason behind other merchants' success based on customer reviews. The cuisine trends can provide an actionable insights to the mercahnts based on the popularity score of the particular regions.

AI Chatbot
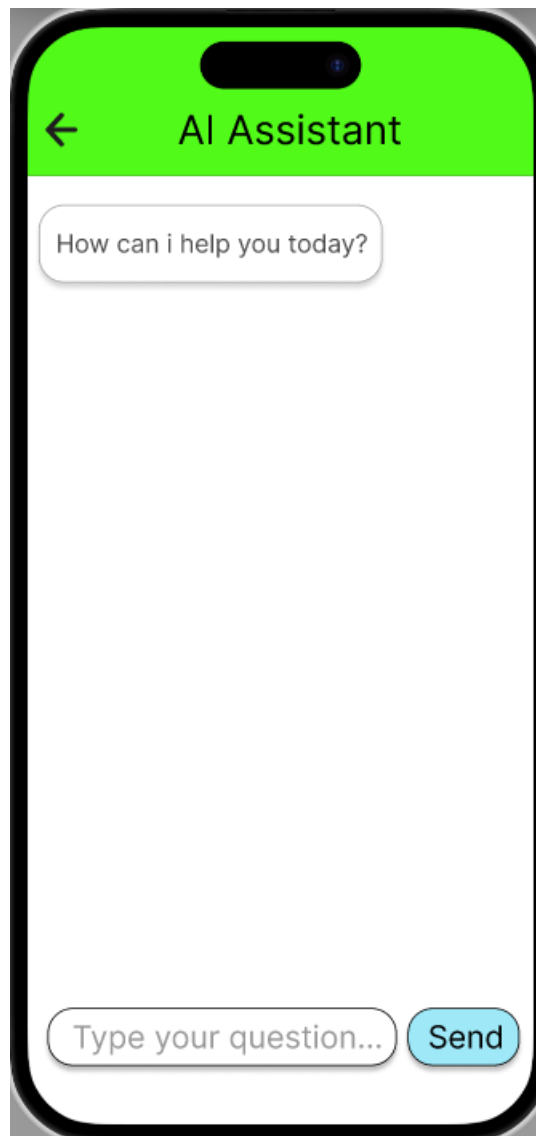
The AI assistant chatbot uses Google's Gemini API to analyze the sales datasets and provide information about the data based on prompts by the merchant. Based on the merchant's data, the AI can deliver personalized recommendations to the merchant by identifying growth opportunities based on other merchants in the surrounding area. The chatbot is able to answer the merchant's questions in any language they prefer, enhancing merchant interaction and engagement.

(Due to Gemini's token limit, the datasets are too large to be ingested, therefore the datasets are summarized beforehand in the code using basic data manipulation functions from pandas.)

References

Google Gemini API. (2024). Retrieved from Google AI for Developers: https://ai.google.dev/gemini-api/docs/api-key

OpenAI. (2025). *ChatGPT*. Retrieved from ChatGPT: https://chat.openai.com **(Assisting with code)**