Project Description:

Supply Scout is a supply-finding app that provides real-time inventory updates for nearby stores. It categorizes stores based on the type of supplies they carry and integrates with maps to help users locate their desired items quickly and efficiently. The app features an intuitive interface, ensuring users can easily navigate and find the supplies they need without confusion.

Requirements Summary:

MINIMUM REQUIREMENTS	Processor Cores	Single Core
	OS	Android 4.4 (KitKat)
	RAM	2 GB
RECOMMENDED REQUIREMENTS	Processor Cores	Quad Core
	OS	Android 8.0(Oreo)
	RAM	4 GB
OTHER REQUIREMENTS	Permissions	Notifications and Storage

Table 1. System Requirements

To cater to low-end android models, the application will have at most a minimum of 1 Core, 2 GB worth or RAM, and Android version 4.4 or KitKat as its OS. The app itself is not at all demanding, hence our team has settled on lower requirement specs.

Overview

Due to the ongoing online classes, the team is unable to conduct this evaluation through normal means. Instead, alternatives were used such as the use of online social media platforms such as Microsoft Teams and Discord. This is to ensure that the pair will still be able to see a live feed of what is currently happening in the prototype.

With that said, the Evaluation plan is split into three separate parts: Usability Specifications, Heuristics Evaluation, and Participant Survey and Feedback. Below is a table describing each technique.

Technique	Description
Usability Specifications	Usability Specifications is the technique used to evaluate the level of usability that the Prototype has. It consists of tasks that will be done by Participants. Furthermore, the Technique will contain timing the speed of the participants at a given task. The tasks will be split into 3 Sections: Main Menu Task, Folder Tasks, and Quiz Tasks. This task is chosen to properly identify what flaws are seen when the user interacts with the prototype and how easy it is to use said prototype.
Heuristics Evaluation	Heuristics Evaluation will evaluate the UX design of the Prototype in an industrial-standard usability principle. This technique is chosen to provide a quick and approachable way to assess the validity of the Prototype's Design when time or resources are less.
Participant Survey and Feedback	A survey will be provided to participants after conducting the prototype. The survey will contain quantitative questions that are interpreted into a 5-point Likert Scale as well as Qualitative questions in the form of Feedbacks. This will ensure that no designer bias will be done to the result of this evaluation.

The tasks for this Prototype are split into three (3) different Sections: Main Menu Tasks, Folder Tasks, and Quiz Tasks. Below are some of the tasks that the selected participants will be asked to perform for each Section to showcase the Prototype's functionality:

- Enter and Exit the Prototype (**Main Menu Task**)
- How easy will the user be able to navigate while using the Prototype.
- Participants will be tasked in searching and sorting the things they want to search (**Search and Sort Tasks**)
- Participants will be tasked in changing from buyer to seller and vice versa (**Switch Task**)

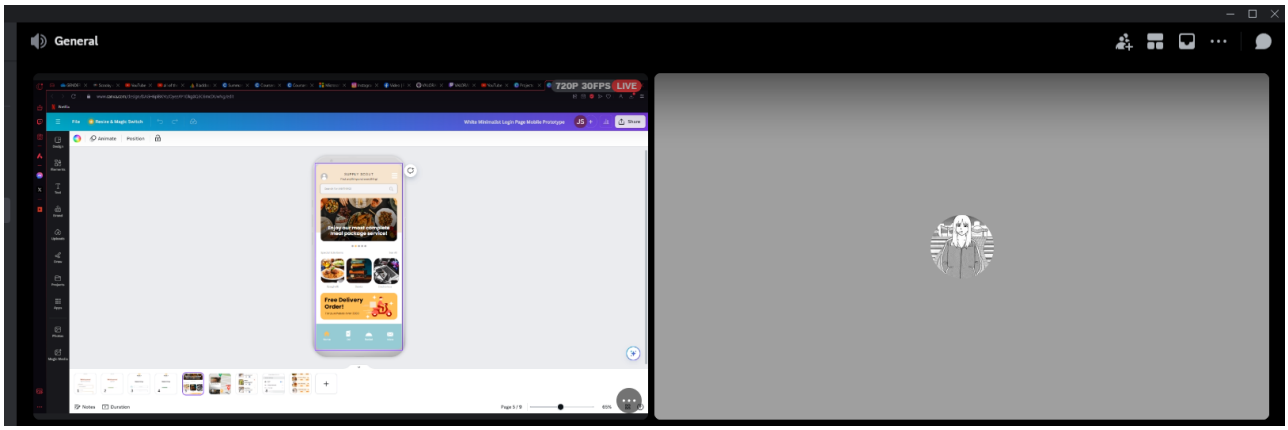
Reasons that these tasks were selected for the participants since the Prototype was designed with these measures in mind:

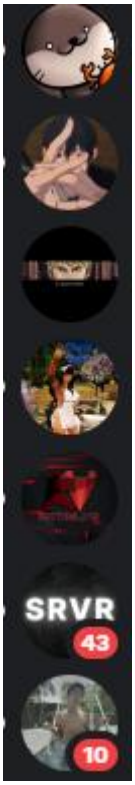
- Easy Navigation
- Usefulness

Method of conducting Online Tests:

Social media platforms were used in conducting the online tests for this evaluation. Below are screenshots showing how the evaluation underwent.

Discord Call





Different servers that I asked for feedback

Data Presentation

Data Analysis

Usability Specifications

During the online testing with participants, Team JSR observed that the participants interacted well with the prototype. Almost all of them successfully completed the tasks given by the team members with minimal issues. Further observation showed that the participants quickly learned and memorized the steps and navigation of the prototype, allowing them to navigate easily. However, some buttons on the prototype were unresponsive when clicked, likely due to design constraints that were overlooked.

Task	Mean	Interpretation	Classification
Main Menu Task	0.25 minutes	Highly Acceptable	Successful
Switching Task	10 seconds	Highly Acceptable	Successful
Searching and Sort Task	13 seconds	Highly Acceptable	Successful

Table 3. Task Time

Table 3 shows the results of the timed tasks during the Online Testing. The data shows that the Participants were overall able to accomplish each task sections with amazing times. With this result, the prototype is interpreted as successful in all three (3) task sections.

Heuristic Evaluation of the Supply Scout Prototype

Visibility of System Status
The prototype effectively informed participants about its current state.

Match Between System and Real World
The prototype used simple English, making it easily understandable for all participant age groups. Words and phrases were clear and comprehensible.

User Control and Freedom
The prototype included fail-safes like "Cancel" and "X" buttons to help participants recover from mis-clicks or unclear instructions. Back buttons were also available as additional fail-safes.

Consistency and Standards
While the prototype maintained general consistency, some issues were noted, such as the inconsistent placement of back buttons and tap locations.

Error Prevention
The prototype included measures to prevent errors, though a few minor issues still affected the user experience.

Recognition Rather Than Recall
Options, objects, and actions were clearly visible, aiding user interaction with the prototype.

Flexibility and Efficiency of Use
Both experienced and inexperienced users could easily understand and use the Canva-style prototype.

Aesthetic and Minimalist Design
The prototype featured a sleek, simple design that aligned with the modern-minimalistic theme, excluding unnecessary information.

Help Users Recognize, Diagnose, and Recover from Errors
This area was a weakness. Although the prototype indicated when a non-interactive part was clicked, it lacked clear, plain-language assistance to help users recover from errors.

Help and Documentation
Users could access help or assistance from the present team members.

Heuristics Conclusion
Overall, the prototype adhered to most heuristic evaluations but had some issues that need to be addressed and fixed.

Participant Survey and Feedback

Results

SECTION 1			
Question	Mean	Interpretation	Classification
On a scale of 1 to 5 how would you rate your experience with the Supply Scout Prototype	4	Acceptable	Successful
On a scale of 1 to 5 how was the UI design of the píototype	4.18	Acceptable	Successful
How easily weíe you able to follow the tasks píovided	4.09	Acceptable	Successful
SECTION 2			
Changing customer type	4.27	Acceptable	Successful
Sorting and Searching	4.45	Acceptable	Successful
Navigation of the app	3.91	Moderately Acceptable	Neutral
Accessing orders	4.82	Highly Acceptable	Successful
Accessing emails	4.55	Highly Acceptable	Successful
Using the GPS feature	4.64	Highly Acceptable	Successful
Ease of use	4.64	Highly Acceptable	Successful
Login feature	4.45	Acceptable	Successful

Registration Feature	4.27	Acceptable	Successful
Helpful	4.36	Acceptable	Successful
Average	4.36	Acceptable	Successful

Table 3. Survey Data Interpretation

The table displays data from the survey conducted after the online testing, indicating that the prototype is at an acceptable quality level and considered successful. However, the pair plans to focus on renaming files and folders, which received a neutral response. According to the 10 Usability Heuristics Criteria, the data reveals that the prototype pleased the participants and met the criteria with strengths like its minimalistic design and visibility. The main area needing improvement is the app's navigation.

Feedback

While most of the feedback were overwhelmingly positive. Some feedbacks are focused on a few issues. Such common issues revolve around the renaming feature of the Prototype. These issues tend to raise concern that the Renaming was somewhat difficult to follow.

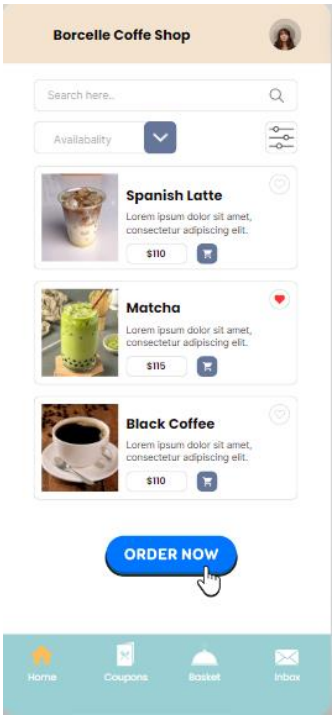
Design Implications:

- Does your prototype need to be altered in order to address the results of the analysis, or was it completely successful?
    - The results of the Prototype show it was very successful and is at an acceptable stage. However, the team still decided to improve upon the navigation of the task as the users were confused on how to get back to certain points

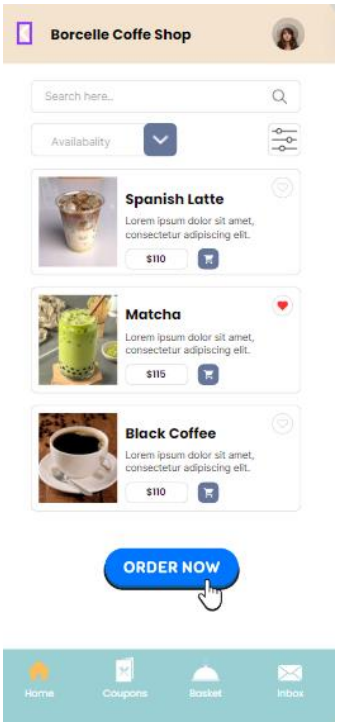
      Below are some of the feedbacks that state their concerns about this feature:
        - *Application Navigation are inconsistent .*

- What improvements could be made to the design to address any shortcomings?

  To address this issue, the team has decided to add the missing "back arrow" icons in each file and folder. This change will enhance the navigation experience by providing users with a clear and consistent way to return to previous screens. The back arrow icons will be strategically placed to ensure they are easily noticeable and accessible, reducing confusion and improving overall usability. By implementing this adjustment, the team aims to align the prototype more closely with the heuristic principles of user control and freedom, as well as consistency and standards, thereby creating a more intuitive and user-friendly interface.

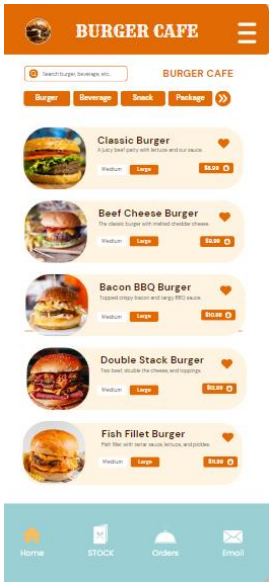


Before Alterations

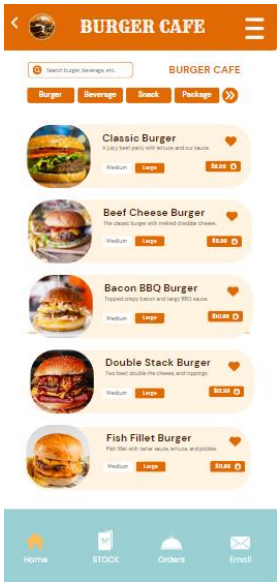


After Alterations

Before Alterations



After Alterations



Did you discover any major flaws that would suggest a completely different type of design?

- No major flaws but there were flaws from the original idea from part 2 where the design would potentially not be well received.

- There were a few issues with the recent Design that the team would also like to address. The issue being that the constraints of some button seemed out of place and needed to be adjusted.

- **Small Tap-Box which is a problem to larger screens.**

- **Tap-Box increased in size to accommodate larger screens.**

Critique and Summary:

What were the advantages and disadvantages of your evaluation?

- The benefits of conducting this evaluation included the ability to gather crucial information and data essential for the prototype. Additionally, contacting participants for the online test evaluation was easier and successful, with necessary links being shared via social media. However, a drawback was the lack of physical contact or laboratory work, which could have provided more comprehensive data for the prototype. Furthermore, frequent internet issues in the Philippines often resulted in delays in contacting participants, as slow internet speeds affected the team's ability to effectively observe interactions. Essentially, slower internet made it more challenging to assess the prototype on screen.

What would you have done differently knowing what you know now (both designwise and evaluation-wise)? Given more resources, what could you have done that would have produced significantly more insightful evaluation results (again, whether this is an improved prototype or a different evaluation path).

- . Given more time, the team would have conducted two separate evaluations: one for the initial proposal prototype and another for the revised prototype. This approach would have provided the necessary evaluations to fully complete the prototype. Additionally, with more resources, the team believed it would be possible to implement back-end coding to solidify the prototype into a fully functioning application ready for submission to app stores worldwide. They also aimed to enhance the prototype by adding more features, such as notifications and online capabilities.

Summary of the Project

The selected benchmark tasks for Supply Scout were vital to the prototype itself, essential for evaluating user interaction with the prototype. This assessment helped the team identify areas for improvement. Successful aspects of the prototype included the registration system and easy navigation, though there were drawbacks like the renaming issue and inconsistent navigation. The team also did not implement online features, which would have enhanced the prototype's functionality but were omitted due to time constraints. With more time, the team would add online features, music capabilities, and other enhancements to give the prototype a unique and fresh feel.

The conclusions drawn from this study highlight that designing a prototype is challenging, requiring substantial knowledge of interface design and a clear understanding of the problem and target users. This study revealed how well participants, despite being first-time users, adapted to the Android UI of the prototype. Overall, the team concludes that the design of the prototype was acceptable and effective, deeming it a success.