

## **Team JSR**

**Members:** Remitio

### **Overview:**

Without proper knowledge of local stores and inventory, finding essential supplies can become quite challenging. Locating specific items requires knowledge of nearby stores and their stock, as well as considering your current location to get what you need. This can become very difficult and inconvenient, especially for those who are in a hurry or unfamiliar with the area.

Thus, we propose **Supply Scout**, a supply-finding app that not only shows you available stores in your area but also provides real-time inventory updates to see if the user's desired items are in stock. Knowing that supply needs can vary greatly, the app will categorize each store based on the type of supplies they carry, providing a much simpler and more convenient interface for people to use. When they look at the map integrated with the app, users will easily locate stores and items without confusion about their current position.

### **Characteristics of the Users:**

The primary users of SupplyScout will be individuals who are looking for essential supplies in their area, such as groceries, hardware, or other necessities. These users will utilize the app to locate nearby stores, check real-time inventory updates, and navigate to their desired items quickly and efficiently. The secondary users of SupplyScout will be store owners and managers,

who can use the app to register their store's inventory and update stock levels. This allows them to attract more customers by ensuring their offerings are visible and up-to-date for users in need of supplies.

### **Task Analysis:**

#### **Important Characteristics of the Task Performed by Users:**

**A user must be able to do the following with the system:**

- View available stores in their area
- View individual inventory of stores
- Send notifications to stores for any specific inquiries or reservations
- Identify their current location for improved navigation and supply finding
- Important Characteristics of the Task Environment:

#### **Important Characteristics of the Task Environment:**

- Count available stores in a given area
- Track real-time inventory in said area
- List all items that could be available

## **Task Analysis of the Problem:**

**Task:** Provide both customers and store owners with an interactive platform for efficient supply finding

**Subtask 1:** Customers are able to view both available stores and available items

- Get location of customer
- Show available items in nearby stores
- Show available stores on a map
- Send notifications to stores for specific inquiries or reservations

**Subtask 2:** Customers can save favorite stores and items for quick access

- Allow customers to mark stores as favorites
- Enable customers to create a wishlist of frequently needed items
- Provide quick access to favorite stores and items from the main interface

**Subtask 3:** Store owners receive notifications for potential customers in the area

- View potential customers in the area
- Receive notifications for any customer inquiries or reservation requests

## **Analysis of Existing Systems:**

### **Instacart:**

Offers a wide range of grocery stores with real-time inventory updates.

Provides same-day delivery options for added convenience.

May incur service fees and delivery charges, with limited availability in certain areas.

Occasionally experiences issues with out-of-stock items and substitutions.

**Strengths:** Provides a comprehensive solution for grocery shopping with a variety of choices and convenient delivery options.

**Weaknesses:** Service fees and delivery charges may deter some users, while limited availability in certain areas may restrict accessibility.

### **Google Maps:**

Offers comprehensive location data, user reviews, and detailed information on local businesses.

Helps users navigate to desired stores or businesses efficiently.

Lacks real-time inventory information and direct integration with online shopping platforms.

May not include all local stores or have up-to-date information on smaller businesses.

**Strengths:** Provides extensive location information and navigation assistance, making it easy for users to find nearby stores.

**Weaknesses:** Lack of real-time inventory updates and direct shopping integration may require users to visit stores physically to check availability. Limited coverage of smaller businesses may result in incomplete or outdated information.

## **SupplyScout:**

Allows users to view available stores in their area and check real-time inventory updates.

Offers notifications to stores for specific inquiries or reservations.

Helps users identify their current location for improved navigation and supply finding.

Potential limitations may include the need for extensive store participation for comprehensive coverage and real-time updates.

**Strengths:** Provides a platform for efficient supply finding with real-time inventory updates and communication features between users and stores.

**Weaknesses:** Relies on widespread adoption by stores to ensure comprehensive coverage and up-to-date inventory information. May require ongoing maintenance and updates to address user needs and preferences.

## **Larger Social and Technical System:**

**SupplyScout** aims to enhance the shopping experience on a larger scale by providing users with a convenient platform to locate essential supplies in their vicinity. By offering real-time inventory updates and store notifications, SupplyScout helps users efficiently navigate to stores with available items, reducing time spent searching and traveling. The main goal of SupplyScout is to establish a more convenient medium for users to access necessary supplies, while also aiding store owners by attracting potential customers and streamlining communication for inquiries and reservations. This improves overall efficiency in the supply chain and enhances the shopping experience for both users and stores.

## **Usability Criteria**

**Efficiency:** Supply Scout should provide a streamlined and efficient experience for users, minimizing loading times and delays while navigating the app and searching for supplies.

**Navigation:** The app's user interface should be intuitive and easy to navigate, allowing users to quickly find stores, view inventory, and make inquiries or reservations without confusion.

**Accessibility:** Supply Scout should be accessible to users at all times, whether they are using Wi-Fi or mobile data, ensuring that users can access the app whenever they need to find essential supplies.

**Availability:** The app should be available and functional during all appropriate time periods when stores are open and users are actively seeking supplies, ensuring practicality and usefulness throughout the day.

**Reliability:** Supply Scout should consistently provide accurate and up-to-date information about available stores and inventory, without unexpected crashes or errors, ensuring that users can rely on the app to fulfill their supply needs reliably.

**Overall Implications:**

Overall, SupplyScout aims to revolutionize the way users access essential supplies by providing a convenient platform for locating stores and checking real-time inventory. By addressing the need for efficient supply finding, SupplyScout enhances the overall shopping experience for both users and store owners. While existing apps cater to transportation services like taxis and jeepneys, SupplyScout fills a unique niche, offering a seamless and stress-free solution for users seeking essential supplies. This not only streamlines the supply chain but also contributes to a more convenient and relaxed shopping experience for all involved.