

# DSD Requirements Analysis

Group: Brave Ones

Theme: Wechat Mini Program Development

Time: 03/14/2024

## Requirements from Customers:

**Requirements 1:** Set and edit personal information

**Description:** Customers should be able to input and update their personal details such as name, ID, age, interests, recent work, and password, enabling a personalized experience.

**Requirements 2:** Receive and manage notifications related to interests

**Description:** Users should receive alerts on items that match their interests as they approach stores and have the ability to manage these notifications within the app.

**Requirements 3:** View and navigate to the map and location of stores

**Description:** The app must provide a feature for users to view stores on a map, showing their locations, and offer navigation options to reach them.

**Requirements 4:** Ability to find and confirm items in the store

**Description:** Once inside the store, users should have a mechanism, such as scanning, to confirm the items they find, facilitating the treasure hunt process.

**Requirements 5:** Save and view the list of "hunted" items

**Description:** Users should have a dedicated space within the app to save and later view the items they have collected or shown interest in during their hunts.

**Requirements 6:** Provide feedback on items and notifications

**Description:** There should be a feature allowing users to give feedback on the relevance and accuracy of the notifications received and the items found, aiding in the improvement of the app's recommendation algorithm.

### Requirements from Shopkeeper:

**Requirements 1:** Post pictures and descriptions of items

**Description:** Shop owners must be able to upload images and descriptions of the items or treasures available in their store, making them visible to potential customers.

**Requirements 2:** Provide basic store information

**Description:** Owners need to input basic information about their store, including name, location, and type of items available, to be displayed to users within the app.

**Requirements 3:** Receive statistical data on customer visits and feedback

**Description:** A feature should be available for shop owners to receive analytics on customer visits, interests, and feedback on items, helping them to understand customer preferences and improve their offerings.

### Requirements for AI algorithm group:

**Requirements 1:** Interest recommendations based on personal and item information

**Description:** The AI algorithm should analyze user profiles and item details to make personalized recommendations, enhancing user engagement by alerting them to items of interest nearby.

**Requirements 2:** Feedback improvement on store and recommendation effectiveness rating

**Description:** The algorithm must utilize customer feedback on recommendations and items to refine its accuracy and effectiveness in matching users with their interests.

**Requirements 3:** Provide a list of recommendations for relevant users

**Description:** Based on the analysis of user interests and behaviors, the AI should compile and update a list of recommended items, ensuring users receive tailored notifications.

### Requirements for Database group:

**Requirements 1:** Store personal information and preference settings

**Description:** A secure database should be established to store user profiles, including their interests and preferences, ensuring privacy and data protection.

**Requirements 2:** Store item and store information

**Description:** The database must contain detailed records of items and stores, including descriptions, images, and location data, to facilitate the matching process.

**Requirement 3:** Record feedback and statistical data

**Description:** Feedback from users on items and their interaction data should be stored for analysis, helping in the continuous improvement of the service.

**Requirement 4:** Provide an API interface for data access and operations

**Description:** An API should be developed to enable secure and efficient access to the database by the app and web services, facilitating data retrieval and updates.

**Requirement 5:** Save and keep WeChat users' account information

**Description:** WeChat mini program doesn't need a register form but it is necessary to send the account information of new users to the backend so that it can be saved in the database

### Requirements for Web Page group:

**Requirements 1:** Provide the information of the shops

**Description:** The detailed and updated information of the shops should be provided, ensuring users can learn more about the shops.

### Requirements for Android APP Group:

**Requirements 1:** Ensure functionality matches that of the WeChat Mini Program version

**Description:** The Android app should offer all the functionalities present in the WeChat Mini Program, ensuring a consistent user experience across platforms.

**Requirement 2:** Consistency in interaction design and user experience

**Description:** The design and user interface of the Android app should be harmonized with the WeChat Mini Program, providing a seamless experience for users who use both platforms.