NOVA SCHOOL OF SCIENCE & TECHNOLOGY

Interação Pessoa-Máquina

2023/2024

SyncShop

Stage 2: User and Task Analysis

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October 2023

Problem Description

Collaborating with a diverse group of individuals in a shared space involves effective teamwork to manage multiple responsibilities. This demands seamless organization and communication among the team members. However, this can be a challenge when working with groups of different sizes and levels of experience. To address this, we've developed a mobile application designed to serve as a communication and organization intermediary for collective shopping needs, streamlining the intricacies of coexisting within a group in a shared space.

Users Classes

In this section, we delve into the various user classes that form the core of our target user population for the purpose of identifying their unique characteristics and needs. Our user classes consist of Displaced University Students, University Students (living with their families) and Family Members. It is noteworthy that Displaced University Students and University Students share several common characteristics. Understanding these user classes and their distinctive attributes is pivotal in tailoring our services and solutions to better cater to their diverse requirements.

Displaced University Students

Demographic Information:

- Age: 18-30;
- Gender: Mixed;
- Education Level: Students.

Psychographic Information: Varied interests, from sustainability to social interaction; Busy student lifestyle with a focus on convenience.

User Goals and Objectives: Primary Goal: Efficiently manage shared responsibilities and resources; Secondary Goals: Simplify the shopping process and reduce conflicts over personal needs.

Tasks and Activities: Shopping coordination between elements of the same household.

Context of Use: They access the system via a mobile app within the co-living space.

Challenges and Pain Points: Difficulty in coordinating shopping lists and needs efficiently; Item categorization and organization.

Technological Proficiency: Comfortable with smartphone usage.

University Students

Demographic Information:
- Age: 18-30;
- Gender: Mixed;
- Education Level: Students.

Psychographic Information: Varied interests, from sustainability to social interaction; Varied interests, routines, and priorities.

User Goals and Objectives: Primary Goal: Efficiently manage personal shopping list; Secondary Goals: Simplify the shopping process and reduce conflicts over personal needs.

Tasks and Activities: Keep an organized list of needs; Share multiple lists for different purposes.

Context of Use: They access the system via a mobile app within the co-living space.

Challenges and Pain Points: Difficulty in organizing shopping lists and needs efficiently.

Technological Proficiency: Comfortable with smartphone usage.

Family Members

Demographic Information:
- Age: Varied (parents, children, grandparents);
- Gender: Mixed;
- Education Level: Varied.

Psychographic Information: Strong emotional and familial bonds; Varied interests, routines, and priorities.

User Goals and Objectives: Primary Goal: Efficiently manage shared responsibilities and resources; Secondary Goals: Maintain a harmonious and organized family life.

Tasks and Activities: Shopping coordination between family members.

Context of Use: They access the system via a mobile app within the co-living space.

Challenges and Pain Points: Keeping everyone informed about schedules and activities; User roles and permissions; Avoiding conflicts and misunderstandings within the family.

Technological Proficiency: Comfortable with smartphone usage but may require user-friendly interfaces.

Tasks

Let's now discuss the key tasks available within our mobile application:

Firstly, let's address the tasks related to the user. These tasks encompass user creation (sign-up) and user login. Both tasks require filling in a few text input boxes, as is typical in most applications. It's worth noting that a user cannot create an account using an email address already associated with another account in the app. These tasks are crucial for maintaining individual shopping lists, even when users switch devices. However, these tasks will be relatively infrequent because once users have their accounts set up, their primary focus will be on utilizing the app for its core purpose: organizing shopping lists.

Once a user has successfully set up their account, they can create different shopping lists with different groups of people. Creating a list involves simply naming it. After this, the user can obtain an invite code for that list and share it with other people. The other users can add the shopping list to their lists by entering the invite code in the "Join List" section of the app. While these tasks may not be the most frequent, users can create new shopping lists whenever they feel that they would benefit from having additional shopping lists within the app.

Once a shopping list is set up with its members, users can add items to it by entering the product's name, selecting its shopping category (e.g., meat, bakery, animal care, hygiene), and specifying its priority level on a scale of 1 to 3. These items become visible to all the list members. When a member of the list goes shopping, they can filter the shopping list by categories and/or sort it by priority to streamline their shopping experience. Upon purchasing an item from the shopping list, users can declare it as "bought" in the app by either swiping the item or tapping a button. These tasks will be the most frequently performed by users since they constitute the core functionality of the app, as shopping is an activity that consistently benefits from the app's features.

Scenarios

Now let’s see some possible usage scenarios which will include the previous tasks.

The main usage scenario is when a user goes shopping for the items in the list. Let’s now create a fake scenario and describe the user's actions.

While Mr. Leite was at work, he received a message from a family member instructing him to take on the responsibility of grocery shopping. Upon receiving this message, Mr. Leite felt relieved knowing that he had a centralized shopping list accessible on his mobile phone. Without hesitation, he opened the shopping app. Being a loyal SyncShop user, he already had an existing account, and he was promptly greeted with the shopping list selection screen.
After selecting the appropriate shopping list, he was presented with the list of items. Mr. Leite's goal was to completely empty the shopping list, making prioritization unnecessary. However, he noticed that he was conveniently located near the Bakery section of the supermarket. To streamline his shopping experience, he decided to organize the list by category, focusing specifically on the Bakery category.
With the list now segmented by category, Mr. Leite easily identified the items he needed to purchase from the Bakery section. He proceeded to gather these items one by one. After picking up each item, he simply swiped right on the item's box within the app to mark it as bought, following the same process for all items in their respective categories.
Upon completing this efficient shopping journey, Mr. Leite successfully emptied the shopping list, and all his required purchases were complete.

Now let’s see two other usage scenarios, one in which a shopping list member remembers he needs to add something to the list and another one in which a family member is invited to a newly created shopping list.

In this next scenario, we will consider Joãozinho, Mr. Leite’s 17 years old son.

As Joãozinho prepared to head off to school one morning, he had a brilliant idea to plan his pre-gym meal. Recognizing the need for a lot of energy, he thought of cooking a protein-rich oatmeal snack with bananas. However, a moment of disappointment struck him when he recalled consuming all the available protein and bananas the day before, putting his meal plans in jeopardy.
Resourceful as ever, Joãozinho recalled the utility of the SyncShop app and promptly messaged his father to go grocery shopping. With determination, he launched the app, selected the family’s shopping list, and tapped on the "Add" icon. While the app displayed some previously purchased items, Joãozinho opted to create a new product from scratch.
Within the "Add Product" screen, he was presented with fields for "Name", "Categories", and "Priority". Joãozinho swiftly entered "1 Chocolate Whey Protein" as the product name, designated the category as "Health", and set the priority to "High". He followed the same procedure for the bananas.

With his efficient use of the app, Joãozinho ensured he had the necessary ingredients to enjoy a satisfying and nutritious pre-gym meal.

In this final scenario, we will consider that Joãozinho's sister was to be added to the family's shopping list by him.

Joãozinho's sister, Joaninha, had recently begun receiving her allowance and was eager to contribute to the family's weekly grocery shopping. To facilitate this, Joãozinho invited her to the shipping list by accessing the list's settings and copying the invite code.
Subsequently, he forwarded the code to his sister, who had previously registered on the SyncShop app. Joaninha promptly clicked the "Join" button, pasted the code, and seamlessly became a member of the shopping list, fully prepared to assist with any necessary tasks.

Interviews

Considering that our target audience consists of groups of people who share a household or need to coordinate a set of purchases within the group, not limited to a specific age range, we interviewed potential users of different ages and in various housing scenarios, such as parents, students living with parents, and students living away from home.

Starting with parents, it was a common response that an application of this kind would simplify managing the items needed to buy for the household, also allowing for more efficient sharing of the shopping list with their children so they could make the purchases.

Turning to students, both those living with parents and those living away, some mentioned that the application would provide relief from having to carry a shopping list (on paper) and centralize the location of items needing to be purchased, as the list would always be up to date on their mobile devices.

From the perspective of some of our interviewees, this application is viewed as an asset when organizing parties and gatherings with friends. It simplifies the synchronization of the shopping list among all group members and allows each person to add items they remember are needed for the event. Interestingly, this particular use case was not initially anticipated by us. However, this feedback is welcome, as it highlights that users can easily discover various valuable use cases for our application.

In all cases, users mentioned that they would use the application almost daily, adding items to the lists when they realize something needs to be purchased. In several cases, it was suggested that a useful addition to the application would be a feature to split expenses among all members of the shopping list.