Evaluation of the Usability of Store List App

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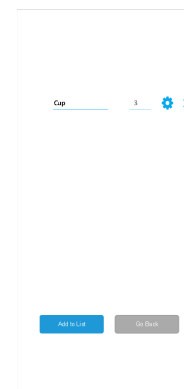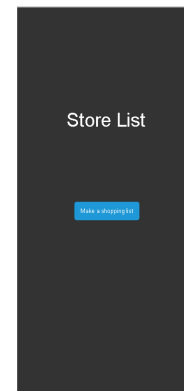Stockton, California
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I. INTRODUCTION

People have continuously struggled with managing store lists using paper. Paper can get lost, jumbled, or torn up. With the invention of our store list app, users will be able to create multiple lists for different stores by experiencing a user-friendly and simple interface. Through memory offloading, users won't have to remember to bring their paper lists since they will have easy access to all of their lists using a normally on-hand device, their phones, to access the application.

II. PRODUCT DESCRIPTION

From a user's perspective, the product has three main features. To enter the app, the user clicks the "Make a shopping list" button which proceeds to the next page of the app. The user then selects a store list for which they would like to modify. The first feature is adding an item to the list in which the user selects the "Add to List" button which activates a pop-up menu. The user can then type in their item and the quantity of the item. Then, the user selects the "Add" button to add the item to the list. The second feature is editing an item in which the user selects the 'cog wheel' icon and a pop-up menu activates. The pop-up menu is the same as adding an item, in which the user enters an item and a quantity. The item is then modified to show the user's input. The third feature is deleting an item in which the user locates the item he/she wants to delete and selects the 'X' icon. The item is then deleted from the list. These features were incorporated in the design of the app because they are fundamental for shopping. A user needs to be able to add, modify, and delete items because that is what defines a shopping list.

III. Evaluation

There were three research questions that we wanted to answer with our product evaluation:

1) Were users able to add an item to a list?
2) Were users able to edit an item of a list?
3) Were users able to delete an item from a list?

IV. Procedure

The first step of the procedure was to ask users (7 participants) for their consent. Here was the consent statement:

"This study is to determine if the current prototype of Store List App meets the requirements we as a group have for the project. Your goal as a test subject is to attempt to perform specific tasks on the app. After performing the tasks, we will ask you to fill out a questionnaire so we can receive your opinions on the app. Do you agree to participate?"

After their consent was received, the second step of the procedure was to have users enter the app. After the users successfully entered the app, they were asked to enter a store list. After they successfully entered a store list, they were asked to add an item. After they successfully added an item, they were asked to edit an item. After they successfully edited an item, they were asked to delete an item. After they successfully deleted an item, we gave them a questionnaire to complete as the last part of our evaluation.

V. Data Collection

Qualitative and quantitative data was collected through our user questionnaire using Google Forms. The questionnaire was administered after every user's evaluation. Here were the questions:

1) What did you like about the app?
2) What did you not like about the app?
3) What suggestions would you recommend?

VI. Analysis

From the questionnaire answers, we were able to construct common themes that related to the research questions. We also counted the responses related to 'editing an item' for question two, "What did you not like about the app?". We then counted the number of suggestions related to 'editing an item' and presented the data in our results.

VII. Results

Every user was able to complete their tasks in a minimal amount of time. Common themes that users liked about the app was that it was "easy and simple to use" and "intuitive". Common themes that users did not like about the app were the inability to edit store names, the store page "lacked neatness", and when modifying an item, users had to start from scratch. Users suggested improvements on appearance, the addition of icons, tweaks to the modification feature, and more instructions, especially on the store page. Regarding the first research question, users did not complain and did not suggest improving the adding feature which meant that 'adding an item' was able to be completed by each user. Based on this, the first research question can be answered with a "yes".

Regarding the second research question, users did complain and suggested improving the modification feature to some degree but the data collected showed that 'editing an item' was still able to be completed by each user, only slightly more time consuming depending on the circumstance. For example, if there was an existing item, "Milk" with a quantity of "2", and the user wanted to only edit the quantity, the user would have to retype "Milk" and enter the desired quantity. Also, from our analysis, 1/7 users complained about 'editing an item' and 3/7 suggested improvements for the feature. Because the main functionality of the feature was not critiqued, the second research question can be answered with a "yes".

Regarding the third research question, users did not complain or suggest improving the delete feature which meant that 'deleting an item' was able to be completed by each user. Based on this, the third research question can be answered with a "yes".

VIII. Conclusion

This project was created to make shopping easier by organizing a user's lists into one simple application rather than having multiple lists on multiple sheets of paper. Our biggest lesson learned is that users appreciated the simplicity of the app and the minimal time it took to add, edit, and delete items.Our future plans would be to replace text icons with symbol icons, make the text and buttons symmetric, rework the modification feature, and rework the store page to enable adding, editing, and deleting stores.