SENG310
Evaluation Plan Proposal

Project "Shopping Savings"
by "The Trio"

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Objectives

The objective of this evaluation is to determine the potential of the usability of shopping savings website. The study will helps to determine whether the system helps to satisfy the user's requirement and understand user experience. The difficulties encountered by users will be considered, and further implementation would be undertaken in order to make the system function properly. Moreover, quantitative and qualitative data are gathered based on the task performed by the user to test the overall usability of the system.

To be specific, users will be given some tasks, and the time taken to perform these tasks will be recorded. For example, the time take for a user to compare the price of items and select the cheapest store will be taken into account. More attention will be focused on problems encountered while performing the tasks. One aspect that we will investigate is whether the user knows how to recover from errors when navigating through the web app. For example, we will observe whether the user can find out how to change the store in the price comparison webpage. General criticism and comments from users for further development on the usability of the system will also be an important part of the objectives.

Participant

There will be 4 participants in this study. All these participants are expected to make errors. The errors caused by these users are very important to improve the system. Participants are:

- A male or female participant who is employed

  This person needs to be at the age of around 40 and should not be a person who is employed in the IT industry. People who have more knowledge about computers and using software would cause less number of errors and may find ways to fix them very easily. This is not the case when comes to non-techy people. They take time to think on the ways to fix a certain error when they use the new application. Moreover people of the age of 40 and who are employed tend to have experience in buying grocery items from different stores. Hence they are familiar with the price comparison of items and selection of grocery stores which help them to be economized.

  A professor at university or any other working class person known to any of the group member would be recruited for this study.

- A university student who is not enrolled in Computer Science or any other engineering degree

  There can be creative ways to redesign the application due to the feedback about this app by the university student. Students have less experience than working class person when comes to grocery shopping. Hence there can be new suggestions to improve certain functionalities and features to improve this web application.
  We can find this student at University of Victoria for this study.

The users are allowed to perform the set of task alone and a team member will be able to guide them in case if they get stuck at any point while performing the task.

Tasks

The participants are required to perform the following tasks. These tasks do not contain detail information on how to make selection and change from different options. The main purpose of these tasks is to let the user understand on how to use the web application based on the instruction shown in the system.

Task 1

You are required to buy 3 items: a bottle of milk, a dozen of eggs and a bottle of apple juice. Please choose the cheapest store and delivery as the method of payment. You wanted your items to be delivered on 3rd march at 11.56 pm. You may choose cash on delivery to pay for your items.

Task 2

You are required to buy 4 items namely, a bottle of milk, a dozen of eggs, a bottle of apple juice and a packet of bacon. You need to select the cheapest store to buy your items because here we are assuming that you have got only 20 bucks to buy the whole grocery items. You select pickup option and have a look at the map to drive to the closest store in your area. You pay with your debit card and save the receipt in order to show it at the store when collecting your items.

Task 3

You wish to buy a packet of bacon, a bottle of milk and a dozen of eggs. You choose the cheapest store and select delivery option for your items to get delivered. When prompted for payment you cancel the payment and choose the second cheapest store. Since you wanted to pay online you prefer to pay with your credit card after selecting the delivery option.

Setting

The location can be a place where there is a laptop or desktop computer in which the user can access internet to run the application. We can use our one of computer labs Engineering Computer science building of University of Victoria for this purpose. If that is not possible we can use the personal computers at home or office of the participant.

Time

The total duration for conducting the study will be maximum of 10 minutes. We expect the user to finish the set of task in less than 10 minutes. Around 3-5 minutes of the total 10 minutes are allocated for the user to recover from errors or go back to a different page and change options according to the task assigned.

Measure

Our survey will be conducted in a cooperative fashion. Candidates will be required to complete certain tasks using our application, and a team member will accompany alongside as a 'coach' to provide assistance when necessary. The candidates are encouraged to provide criticisms. As we are unable to conduct a large scale survey due to the limitation of time and human resources, focusing on collecting quantitative data will not produce a representative result due to the insufficient sample size. Thus, we have concluded that cooperative testing is a more viable method. Such approach allows efficient collection of qualitative data, especially the identification of flaws that are unexpected in the design process.

Quantitative data

Although cooperative testings are not meant to facilitate quantitative data collections, numbers are still important for forming a concrete indication of our application's usability. The followings table shows the criteria of our quantitative data collection.

Total time taken	Total time taken to complete the task
Number of unnecessary steps taken	Number of extra steps taken compared to our expected procedure (e.g. if the user has to go back modify a piece of information twice, two 'unnecessary' steps would be counted)
Number of times where assistance has to be given in order to proceed	In other words, the number of times where the user gets 'stuck'

Qualitative data

Through listening to the live feedback from the candidates, we primarily aim to identify flaws that were not accounted/expected by the developers. To ensure a minimal amount of feedbacks from the candidates, the following questions will be asked at the end of the survey to form the basis of our qualitative data.

Does the application follow a logical flow? If not, please explain.	What seems logical to developers might not be logical to users. This question prompts information about the users' conceptual model.
Do you have a good idea of where you were when going through each of the step?	Again, asking the candidate about the his/her understand of the overall structure

	of the application, this question prompts information about the users' conceptual model.
Would you use this application regularly for grocery shopping. If so, what do you like best about it? If not, what possible improvements might change your mind?	This question prompts information about the general viability of the application.