Usability Testing Process LinDA

Specifying and Prioritizing Features

- ⬚ Priority (How important for success of the product)
  (1= Not very important for the success of the product; 7 = very important)
- ⬚ Concern (How difficult to use)
  (1=Least concerned; 7 = most concerned)

Features	Priority	Concern	Score	To be Tested
Select dataset	6	4	24	Yes
Load Dataset	1	1	1	No
Choose Columns to acquire	7	5	35	Yes
Visualize the Data	6	5	30	Yes
Navigation between Charts	5	5	25	Yes
Create and Understanding the chart results	5	5	25	Yes
Changing Data labels	4	6	24	Yes
Saving	6	4	24	Yes
Exporting	5	4	20	Yes
Change settings	2	5	10	No

Specifying Test Objectives
Writing Background Scenario, Tasks

Background Scenario

You are Perry Johnson, a sales representative working for PC4U selling computer. In your company you are responsible for creating dashboards of sales results.
You are at your office and have opened your dashboarding software.

Feature	Objective	Task
Select Dataset	Can TP (test participant) select the correct dataset from the list of datasets?	You need the sales figures and want to create dashboards based on them, which dataset will you select?
Choose columns to acquire	Can TP choose the columns required for the visualization?	You want to create a chart showing the gross profit over time based on product. Select the columns you would use.
Visualize the Data	Can TP use the columns acquired into appropriate charts?	You want to see the sales trend over time.
Navigate between charts	Can TP navigate between various charts?	You want to see all products contribution to Gross profit.
Create and understand chart results	Can TP understand the resulting chart?	Has the sales figure changed over the last three months? Which product gives the highest and lowest profit to the company?
Changing data labels	Can TP edit the chart labels?	You want to change the "Gross profit" on the chart to "Profit in dollars"
Saving	Can TP save the charts created?	You want to save the chart to use it later.
Exporting	Can TP export the created charts into relevant format?	You want to share the resulting visualization with your manager. How will you do that?

Test Script LinDA Usability Test

Introduction

Hello; Welcome. Thank you for registering for the test, how are you? We are the evaluators of LinDA tool. Our goal for today is to present you the prototype of LinDA, and ask for your feedback to improve the design. This test should take about half an hour. My colleague will be watching this session as a Note taker. It's strictly for research purpose and to improve the design.

Let me tell you a bit more about LinDA. One of the main tasks of LinDA is to help you visualize data and assist SMEs in their daily tasks. LinDA proposes a generic approach for visualization selection in form of a faceted browser that imposes on the user the task of describing the visualization at an unfamiliar level of abstraction.

We will start by talking for a few minutes about your background. Your background information will help us understand the feedback better from your perspective. Then we will give you a scenario and few tasks we want you to do and give your feedback on it. After we wrap up, we will ask you few more questions and give you posttest questionnaire to fill out and we are done. Do you have any questions about that?

Another thing to note is that you will be working on a prototype. Don't be hesitant in using the prototype. You can't break it.

First you will start by reading the scenario out loud, after you start completing the tasks. While completing the tasks, make your best effort to complete each one. If you need help, ask for it. Tell us when you think you have completed each task and when you are starting the next task. We would like you to "Think aloud" as you go through the tasks. Tell us what are you doing, what you are looking for and what are you expecting, what you understand, what is missing etc. If you are silent for some time I will remind you to keep thinking aloud.

Sometimes I may ask you to move on before you finish a task. When I do this it does not mean that you have failed the task, sometimes it may be that we have learned all what we need to know about this task. We prefer you move on to the next task than wasting your time.

Please remember that we are testing and evaluating the prototype and not you. Actually you are testing our prototype and we want you to give us honest feedback on what you think about the prototype to help us improve it. I am not a part of development team so you will not offend me with your honest feedback. At any time during the test, if you need to take a break or step out for a moment, you may do so, just let us know.

Any questions before we begin. Let's start.

Background Questions:

Role: Physic Researcher	Field of Study / Profession: Physics& Medicine
Browser you use:	Operating System you use (optional):
Have you used a visualization tool before?Yes	If yes, can you specify its name? gnu plot, matlab, python, C

Background Scenario

You are Perry Johnson, a sales representative working for PC4U selling computer. In your company you are responsible for creating dashboards of sales results.
You are at your office and have opened your dashboard software.

Note: In the grading scale, 1 is the lowest and 7 is the highest.

Tasks

Task 1

It's Monday morning, you get to the office at 9:00 am. As a part of your daily task, you want to review sales figures.
LinDA has started; you want to choose the appropriate dataset.

 (Follow up questions)

1. Tell us how easy was it to look for the relevant dataset? And why?

Specific which Sales figure I found but what exactly am i looking for.
_____
_____
_____
_____

2. How easy or difficult was the task on a scale of 1-7?

1

Task 2

You want to create a chart showing the gross profit over time (month). What is the 50th data entry in the selected data?

(Follow up question)

1. How would you rate the design to choose the columns on a scale of 1-7? Why?

1	2	3	4	5	6	7

4, novel approach but not intuitive
_____
_____
_____
_____

2. How easy or difficult was it for you to perform this task on a scale of 1-7? Why?

1	2	3	4	5	6	7

6, one needs to understand the column system first
_____
_____
_____
_____

3. How satisfied are you with this preview section on a scale of 1-7? Why

1
_____
_____
_____
_____

Task 3

You want to see the profit trend over the months as line chart. How has the profit been in the last 4 months of the data we have?

 (Follow up question)

1. How easy or difficult was it for you to perform the task on a scale of 1-7?

1   2   3   4   5   6   7

      7, because you need to find the visualize button. How about calling it plot data or something like that

2. How would you rate the navigation to the chart on a scale of 1-7? Why?

1   2   3   4   5   6   7

4, Interesting approach but only pie chart and bar is working

Task 4

You want to add one more column called brand for a new visualization. Keep the already selected two columns in addition to the new column.

 (Follow up question)

    1. How would you rate the design to choose the new column on a scale of 1-7? Why?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

~~4,Straight from matlab&excel~~
_____
_____
_____

    2. How easy or difficult was it for you to perform this task on a scale of 1-7? Why?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

1
_____
_____
_____
_____

    3. How satisfied are you with this preview section on a scale of 1-7? Why?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

_____
Did not see a preview
_____
_____

Task 5

You want to see the brand wise contribution to profit as pie chart. Which brands give the highest and lowest profit? You want to change the label display of "gross profit" to "profit in dollars"

 (Follow up question)

1. How easy or difficult was it for you to perform the task on a scale of 1-7?

1   2   3   4   5   6   7

5, Takes getting used to

2. How would you rate the navigation to the chart on a scale of 1-7? Why?

1   2   3   4   5   6   7

7,Drag n Drop has consumer appeal for the app generation
_____
_____
_____

Task 6

Now you want to access the visualization in future. You want to share these visualizations with your manager who does not use LinDA. Save the current visualization as an image file.

 (Follow up question)

1. How easy or difficult was it for you to perform the task on the scale of 1-7?

1   2   3   4   5   6   7

1

2. How would you rate the navigation to the chart on the scale of 1-7? Why?

1   2   3   4   5   6   7

7, Easy but exits in both excel and matlab already and would be a mandotory feature

Task 7

Visualize another dataset of your own and save the chart.

(Follow up question)

1. How easy or difficult was it for you to perform the task on the scale of 1-7?

Very difficult as no other data set seems to be implemented. Also nonintuitive selection of graphing

1   2   3   4   5   6   7

Design based questions

1. What do you think of the labels and the structure of information on the screen? Are they relevant or misleading?

~~The visualize button. It should be something like plot data or smth. Also the type of graph available should always~~ have all types. Computer should not be telling me what it can plot.

_____

_____

2. How do the terminology match or differ from what you are familiar with?

More or less the same

_____

_____

_____

_____

3. Was there a functionality included that you won't use?

~~Have not seen much functionality i miss in other programs such as matlab~~

_____

_____

_____

Wrap-Up Questions

    1. Overall, what are your general impressions about the prototype?

~~Good but needs improvement . Especially from data to graph process. Matlab is more intuitive~~
_____
_____
_____

    2. What did you like the most?

Flashy and java
_____
_____
_____
_____

    3. What did you like the least?

~~No intuitive compared to matlab~~
_____
_____
_____

Post Test Survey

Questions	1	2	3	4	5	6	7
Overall, How useful would this application prototype would be for you?			3				
Overall, how much functionality was missing from the application that you would like to have?				4			
Overall, how easy or difficult was it for you to perform the tasks today?				4			
Overall, how attractive was the user interface?							7
Overall, how consistent was the user interface?				4			
Overall, how well did the terminology presented in your prototype match your needs?		2					
Overall, how satisfied are you with this application prototype?				4			

a) Which functionality, if any, was missing from the application?

_____
_____
_____
_____

b) Would you use this application prototype to help you perform your job? Why?

_____
_____
_____
_____

c) Would you recommend it to a colleague? Yes/No

_____

d) Please provide any additional feedback here

_____
_____
_____
_____