# 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)
- I 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: Student	Field of Study / Profession: Biology
Browser you use: Chrome	Operating System you use (optional): Windows 8
Have you used a visualization tool before? Yes.	If yes, can you specify its name? Excel

#### **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.	Γell us how eas	y was it to lool	x for the releva	nt dataset? And	why?	
Quite easy	in general though	passed it scanning	g quickly through	the list at first.		
2. 1	How easy or di	fficult was the	task on a scale	of 1-7?		
1	2	3	4	5	6	7
2						

3. Had to carefully scan the list.

	t to create a cl he selected da	nart showing the ta?	e gross profit o	ver time (mont	h). What is the :	50 <sup>th</sup> data
(Follow	up question)					
1. H	low would you	a rate the design	to choose the	columns on a s	cale of 1-7? Wh	ny?
1	2	3	4	5	6	7
. Wish the	columns were gr	ouped in a more st	ructural way.			
2. H	low easy or di	fficult was it for	you to perform	n this task on a	scale of 1-7? V	Vhy?
1	2	3	4	5	6	7
·						
3. H	low satisfied a	re you with this	preview section	on on a scale of	1-7? Why?	

7. I like the preview.

	ant to see the prof ths of the data we		the months as li	ne chart. How	has the profit be	een in the last
(Follo	ow up question)					
1.	How easy or diff	icult was it fo	or you to perform	n the task on a	scale of 1-7?	
1	2	3	4	5	6	7
3.						
2.	How would you	rate the navig	ation to the cha	rt on a scale of	1-7? Why?	
1	2	3	4	5	6	7
6. Son	ne charts don't wor	·k.				

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	n to choose the	new column or	n a scale of 1-7	? Why?
	2	3	4	5	6	7
2.	How easy or di	fficult was it fo	or you to perfor	m this task on a	ı scale of 1-7? V	Why?
Had to	2 reselect columns.	3	4	5	6	7
2	How satisfied a				S 1 79 W/L9	
	How satisfied a 2 before.	re you with this	s preview section 4	on on a scale of	6	7

		vant to see the branwest profit? You v		-	-	_	_
(Fo	ollo	ow up question)					
	1.	How easy or diff	icult was it fo	or you to perform	n the task on a	scale of 1-7?	
1		2	3	4	5	6	7
2.							
	2.	How would you	rate the navig	ation to the cha	rt on a scale of	1-7? Why?	
1 6.		2	3	4	5	6	7

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

(Follow up question)		

	2	3	4	5	6	7
2. I	How would you	rate the navig	ation to the cha	rt on the scale	of 1-7? Why?	
	2	3	4	5	6	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?

1 2 3 4 5 6 7

3.

## **Design based questions**

1.	What do you think of the labels and the structure of information on the screen? Are they relevant or misleading?
They are	relevant.
	How do the terminology match or differ from what you are familiar with?
3.	Was there a functionality included that you won't use?
N	o. Some important functionalities were not working on the contrary.
	5. Some important functionanties were not working on the contrary.

# **Wrap-Up Questions**

1.	Overall, what are your general impressions about the prototype?
Good.	
2.	What did you like the most?
The graphs.	
3.	What did you like the least?
Un	working graphs for some datasets.

# **Post Test Survey**

Questions		2	3	4	5	6	7		
Overall, How useful would this application prototype would be for							X		
you?									
Overall, how much functionality was missing from the application									
that you would like to have?									
O									
Overall, how easy or difficult was it for you to perform the tasks today?			X						
today:									
Overall, how attractive was the user interface?							X		
Overall, now attractive was the user interface.							1		
Overall, how consistent was the user interface?							X		
Overall, how well did the terminology presented in your prototype							X		
match your needs?									
Overall, how satisfied are you with this application prototype?						X			
a) Which functionality, if any, was missing from the application?									
, , , , , , , , , , , , , , , , , , , ,									
b) Would you use this application prototype to help you perform you	our i	$0h^{2}$	Why	?					
Yes, will be nice having a different visualization tool than I already have.	our j	00.	*	•					
							—		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \									
c) Would you recommend it to a colleague? Yes/No Yes									
d) Places mustide any additional feedback have									
d) Please provide any additional feedback here Couldn't figure out how to load new datasets, will be good to have that.									
Couldn't figure out now to load new datasets, will be good to have that.									