Usability Testing Survey Software Engineering

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Table 1: Revision History

Date	$\mathbf{Developer}(\mathbf{s})$	Change
14 March 2025	Sumanya Gulati	Initial Draft
$17~\mathrm{March}~2025$	Sumanya Gulati	Add list of Navigation Tasks
$20~{\rm March}~2025$	Sumanya Gulati	Add test results and observations
26 March 2025	Sumanya Gulati	Add remaining results

1 User and Session Details

Table 2 contains details of each subject who agreed to participate in a Usability Testing Session.

Subject Name	Meghna Saha
Subject Role	Research Assistant to the Project Supervisor
Test Conductor(s)	Sumanya Gulati
Test Date	20 March 2025
Test Mode	In-person
Start Time	5:10 PM
End Time	5:35 PM
Additional Notes	-

Table 2: User and Session Details

2 Navigation Tasks to be Performed

For the purpose of this usability session, the subject has been asked to perform the following tasks, in order:

- 1. Upload a data sheet.
- 2. Upload another data sheet with the same experiment date.
- 3. Locate this data sheet in the table view page.
- 4. Navigate to the experiment table and perform the following operations -
 - (a) Add a new row.
 - (b) Delete an existing row.
 - (c) Add a new column.
 - (d) Delete an existing column.
- 5. Calculate the average of any couple of values in the experiment table.
- 6. (Optional): Perform additional excel-based functions on the values in the experiment table.
- 7. Search for a datapoint in the table using the column and value.
- 8. Generate a graph using all available customization options for the experiment data from **September 26**.

3 User Answers

Users will be asked the following questions to gauge the usability of the application during a user demo assessment. These questions relate to the assessment of non-functional tests NFR-LF1, NFR-UH1, NFR-OE2, and NFR-MS1 outlined in the Software Requirements Specification (SRS).

Navigation and Ease of Use

- (a) How easy or difficult was it to navigate through the application? (Very easy Somewhat easy Neither easy nor difficult Somewhat difficult Very difficult)
 - Answer: Somewhat easy
- (b) Rate the ease of finding a specific button/feature related to the task you were trying to perform. (Very easy Somewhat easy Neither easy nor difficult Somewhat difficult Very difficult)
 - Answer: Somewhat easy

Visual Appearance

- (a) On a scale of 1 to 5, how would you rate the visual appearance of the application? (1 Too cluttered and unappealing, 2 Somewhat unappealing 3 Neutral, 4 Somewhat appealing, 5 Very clean and appealing)
 - Answer: 5
- (b) Is the displayed content (text, tables, graphs) clear, legible and easy to understand?
 - Answer: Yes, very clear except for the queries page that was too cluttered.
- (c) Did the design and layout appear consistent to you across the entire application? If no, please point out any inconsistencies you noticed.
 - Answer: No inconsistencies.
- (d) Did you encounter any unidentifiable symbols or icons? If yes, please describe them.
 - Answer: None

Learning

(a) How easy or difficult was it to learn how to use the different features of the application? (Very easy - Somewhat easy - Neither easy nor difficult - Somewhat difficult - Very difficult)

- Answer: Somewhat easy
- (b) Were there any features or functions you found challenging to understand or figure out? If yes, please describe.
 - Answer: Somewhat easy

Responsiveness

- (a) Did you experience any noticeable delays or interruptions while using the application? If yes, please describe them.
 - Answer: No noticeable delay

Overall Experience

- (a) On a scale of 1 to 5, rate your overall experience using the application. (1 Very poor, 2 Poor, 3 Neutral, 4 Good, 5 Excellent)
 - Answer: 3 only because of the missing functionality
- (b) Do you have any suggestions for improvements to enhance your experience with the application?
 - Answer: The dashboard should display a list of previous insights each graph gave along with previous analyses instead. Additionally, there could be a welcome thing added to the very top of the dashboard. Also, just to maintain contextual consistency, all column names should be replaced with their full forms and units should be added for all of them.

4 Test Conductor Observations

- 1. There was some confusion about the difference between data sheets and experiment sheets.
- 2. The queries page can be made more intuitive.
- 3. The functions in the calculations bar did not work.
- 4. The functionality to add a new row should mimic the one for adding a new column.
- 5. The name and icon for the queries page should be replaced with something more intuitive.
- 6. The font for the graph should be bigger and units and title should be added for each graph.
- 7. The past 3 graphs in the dashboard could be turned into widgets.