

## **Cognitive Walkthrough Report**

### **Task descriptions:**

1. Ben is attending a lecture for his Anatomy class, taking notes using Citeline. This week's lecture is about the respiratory system, so he creates a new document labeled "Respiratory System". He begins by making a short summary of the respiratory system based on the intro slide of the class powerpoint, and adds an image beside this summary. As the lecture proceeds to delve deeper into the individual parts of the respiratory system, he makes subheadings for individual parts and includes notes in the input boxes for each. He adds a section for the upper respiratory tract, and a subsection under it titled "nasal cavity".
2. Dolores is borrowing her friend Ben's notes to review before her anatomy exam. After opening the Respiratory System notes, she first takes a closer look at the diagram of the respiratory system. After viewing the image, she realizes she has forgotten key information regarding the trachea. She moves on from the image and finds the appropriate section of notes, finding further information about the trachea. She notices a typo in the section's title, and renames it accordingly.

### **Walkthrough Scenario Descriptions:**

#### **Scenario 1: Creating a New Document**

1. Enter the Anatomy folder from the home screen
2. Create a new chapter
3. Title the new chapter "Respiratory System"
4. Select the newly created chapter
5. Press the "Open" button
6. Tap the text box labeled "Tap here to begin taking notes", enter information
7. Tap the box labeled "Click here to add image", add image from photo library
8. Tap the plus button labeled "Add Subsection"
9. Tap the new box labeled "Tap to add name...", enter "Upper Respiratory Tract"
10. Tap the plus button named "Add Subsection" under "Upper Respiratory Tract"
11. Tap the new box labeled "Tap to add name...", enter "Nasal Cavity"

#### **Scenario 2: Studying a Completed Document**

1. Select the chapter titled "Respiratory System"

2. Press the “Open” button
3. Tap the respiratory diagram labeled “Click to enlarge”
4. Hit the X button in the corner of the enlarged image
5. Tap the “Lower Respiratory Tract” subsection box
6. Tap the “Trahcea” subsection box & scroll down to relevant information
7. Rename the “Trahcea” subsection to “Trachea”

Link to prototype: [Citeline prototype](#)

Q1: Will users be trying to produce the right outcome? (do users have the right goal? do they recognize that this step is moving towards that goal?)

Q2: Will users see the correct action/control to perform to produce the outcome? (visibility)

Q3: Will users recognize that this is the correct action/control to achieve the desired outcome? (or will they select a different action instead)

Q4: Will users understand the feedback? (will they recognize that they've made progress towards their intended outcome?)

Q5: Will users recognize the wrong path and can they recover? (for any likely alternatives selected, will the feedback lead them to recognize that their choice was not correct? Is there a clear recovery path?)

#### Scenario 1: Creating a New Document

Scenario Description Step	Q1	Q2	Q3	Q4	Q5	Problems/Notes
1	0	0	0	0	1	Little feedback on wrong choice
2	0	0	0	0	0	
3	0	0	0	0	0	
4	0	1	0	1	1	Limited feedback on correct choice, people with weaker vision may not see small change
5	0	0	0	0	0	
6	0	0	0	0	2	If they were to add a new subsection and start typing there, they may not realize.

7	0	2	0	0	0	Button to add photos blends in with empty space
8	0	0	0	0	0	
9	0	0	0	0	0	
10	0	0	3	0	0	There are multiple "Add subsection" buttons, it may not be clear which one is which
11	0	0	0	0	0	

### Scenario 2: Studying a Completed Document

Scenario Description Step	Q1	Q2	Q3	Q4	Q5	Problems/Notes
1	0	0	0	0	0	
2	0	0	0	0	0	
3	0	0	0	0	0	
4	0	0	0	0	0	
5	0	0	0	0	0	
6	0	0	0	0	0	
7	0	3	3	0	3	Renaming is not obvious, Noted to add a three-dotted symbol to edit sections. If the user messes up then they would not know what to do, as the only symbol there is an arrow

Through our cognitive walkthrough, we found that our design was satisfactory in the majority of the scenario description steps we worked through. For the most part, users would be able to create new notes along with the sections and input information accordingly. Having clear text labels along with icons worked well. However, there are some issues that could arise. For instance, in multiple locations in the application, the user could end up making a mistake and not knowing how to solve it. This is shown when trying to input information into a new note document. The user may end up pressing "Add subsection" and start typing in a lower-level body than they originally intended. Another issue that arose was when a user would try to rename or delete a

subsection. There is no clear indication of what to do to achieve these requests, so making it clearer with a three-dotted label/tab could fix this. As for our task descriptions, the first task description was shown to be useful in finding errors in our prototype. The second description showed that we did not need to focus on navigation as much as we thought we did. We could not find many issues in the second, so focusing on another aspect could have proven to be more beneficial.

### **Problems identified:**

Note screen -

- Main subject/folder title for “Anatomy” is not very clear to the user
- More feedback when the note document is selected (by using different color or font)

Document screen

- Make the “add image” section stand out more (color again?)
- 3 dot menu – potential functions
  - Rename subsections
  - Edit view to move sections?
  - Delete subsections
- Which subsection button is the one they should press?
  - This solution could also involve color