Prototype: 🟨 Citeline prototype

Individual Materials:

Nathan:
0 - 4
(0 = least severe, 4 = most severe)

1. [Flexibility and Ease of Use] In slide 2, the "Anatomy" screen, it is somewhat unclear how the user will add content to the image display. Maybe an extra "tap here to upload image" prompt when an item is selected could be helpful. Severity: 1
2. [Flexibility and Ease of Use] In page 5, the open button on the "Anatomy" page might be somewhat unclear as to what it's opening. Severity: 0
3. [Error Prevention/Consistency and Standards] When tapping the "add subsection +" button on a subsection (for example, the "Chapter 5 - Respiratory System Notes" page), the button appears underneath the name that the new subsection will be set as. The button could instead be to the right, or something similar. Severity: 1
4. [Error Prevention/Consistency and Standards] When adding a subsection to a subsection (ex: page 11 of the prototype), the "Add subsection +" buttons appear next to each other. Severity: 2
5. [User Control and Freedom] On the front of the "Anatomy" page, there is no button to allow the user to more easily export and/or share the notes. Even if this has to be simulated, it would probably be a solid addition to perceived usability. Severity: 2
6. [Help Users Recognize and Recover from Errors] There doesn't seem to be a button to allow users to delete subsections and/or major sections. Severity: 1
7. [Visibility of System Status] There should probably be more color in at least the default display. Will need to decide on a color choice for the defaults, and potentially for user chosen themes. severity: 3
8. [User Control and Freedom] There is no search bar option. Users may struggle to navigate large quantities of notes. Severity: 0
9. [User Control and Freedom] There is currently no option to reorder major sections or subsections. Severity: 0
10. [Recognition vs. Recall/Error Prevention] There is currently no option to name/rename an image when it is in expanded view. Severity: 0

Gabe:
0-4 (0 = not severe, 4 = most severe)

1) Flexibility and ease of use
- Slide 1: missing a "recently edited" section of the most recent documents a user has worked on, could save a few clicks
- slide 2: missing search function to find note document in file system
- slide 6: missing search function to find topics within note documents
2) User Control and Freedom

- slide 6: No undo/redo buttons for creating subheaders and editing text
3) Consistency and Standards
- slide 22: no obvious visual hierarchy between levels of subheadings
4) Help Users Recognize, Diagnose, and Recover from Errors
- slide 6: No obvious way to delete or edit subsection headers
5) Match Between System and Real World
- slide 18: "pencil" icon may not register as add/delete option in the picture menu, since pencils are more associated with writing than images
6) Error Prevention
7) Visibility of System Status
- slide 20: no differentiation between levels of subheadings besides thin lines on the far left side
8) Recognition vs Recall
- slide 17: no option to open all subsections at once, or view table of contents
- slide 7: scroll bars for too much text instead of dynamically extending the text box size
9) Aesthetic and Minimalist Design
- slide 1: Lots of empty space on opening/home page
10) Help and Documentation
- slide 23: Settings button with no technical tutorials implemented

Dida:

Screen 12, User Control and Freedom (heuristic #2). User cannot undo creating a subsection. Severity: 3
Screen 8, Recognition vs Recall (heuristic #8). User should be able to see that the picture is for an album, not a single image. Severity: 1
Screen 3, User Control and Freedom (heuristic #2). User cannot undo/reorganize creating a chapter. Severity: 3
Screen 21, Recognition vs Recall (heuristic #8). Users cannot search for information, so they will have to open multiple tabs to find their info. Adding search will remove this issue. Severity: 3
Screen 11, Aesthetic and Minimalist Design (heuristic #9). Gray, bland color schemes could leave users disinterested, and could also help with differentiating sections. Severity: 1
Screen 20, User Control and Freedom (heuristic #2). No edit button to move subsections around, makes for a very static and difficult to edit program. Severity: 3

Elliot Woolley

Subject Screen

- Flexibility and Ease of Use

- - Lacking search function
  - – User Control and Freedom
    - ○ No way to undo the creation or deletion of a subject

Chapter Screen

- – Flexibility and Ease of Use
  - ○ Lacking search function
  - ○ Add image text is not as clear as it could be
- – User Control and Freedom
  - ○ No way to undo the creation or deletion of a chapter

Notes Screen

- – Flexibility and Ease of Use
  - ○ Lacking search function
  - ○ Add image text is not as clear as it could be
  - ○ Lacking an option to expand or collapse all sections
- – User Control and Freedom
  - ○ No way to undo the creation or deletion of a section
- – Help Users Recognize, Diagnose, and Recover from Errors
  - ○ No way to move sections created at the wrong depth
- – Recognition vs. Recall
  - ○ No visibility on section management

Matin:

(0 = least severe, 4 = most severe)

1-[Screen 7] If a user adds a new page, how can they save it? Need to add a save button. (Error Prevention)) Severity: 3

2- [Screen7] If a user saves the new document, will the app give feedback to them like, "you saved the new document at 8:00 pm in the biology folder"? We can add this feature to our app. (Visibility of System Status) Severity: 2

3- [Screen4]When a user clicks on the "Add chapter", will the app send them feedback like "you created a new chapter or document"? We can add this feature to our app.(Visibility of System Status) Severity: 2

4- [Screen10] We can show the new documents with different colors and font sizes. (Recognition vs. Recall) Severity: 1

5- [Screen 11], would there be any difference between the "add subsection" box under the respiratory system and the upper respiratory tract which is a subsection of the

respiratory system? I think we can use different colors and fonts or even names to make it obvious for users. (Recognition vs. Recall) Severity: 2

6- [Screen 16], this picture will show up when the user clicks on chapter 5. Is this picture chosen by the user as a cover photo for this subject (like chapter 5)? If not and it's an image from a document, how about if we have more than 1 image in the document, how would the app decide about which picture will be the cover image? (Error Prevention) Severity: 2

7- [Screen 20], it's kind of hard to recognize that Larynx and Trachea are subsections of the Lower Respiratory Tract or the Respiratory System. I think if we use different colors and font sizes, we can solve this problem. Also we can use indentation or a line (like the Professor Moen's method) to make it easier to read for users. (Recognition vs. Recall) Severity: 3

Lorenzo:

1. Recognition vs Recall - If there are more than 5 chapters on slide two, the Add Chapter button will not be visible. Add scroll bar & should the button always be visible? 2/4
2. Flexibility & Ease of Use - How are sections edited by the user? Position, title, content, etc. If there is an edit mode, how would we adequately inform the user of system status? 3/4
3. Match Between System & Real World - Is a pencil the best icon to represent the functions that this button will have? To me this suggests editing, but not deleting or adding photos which the button will also do. 1/4
4. Error Prevention - How do we better distinguish between Add subsection buttons? 2/4
5. Error Prevention - Because of the app's layout, it may be easy for users to add more sections to a completed document on accident. 2/4
6. User Control & Freedom - an undo function would be helpful. Probably native to Android, but mentioning just in case we have to add it ourselves. 0/4
7. Aesthetic - Interface looks gross in our slide prototype. 1/4

Consolidated list:

1. [Flexibility and Ease of Use] In slide 2, the "Anatomy" screen, it is somewhat unclear how the user will add content to the image display. Maybe an extra "tap here to upload image" prompt when an item is selected could be helpful. Severity: 1
2. [Flexibility and Ease of Use] In page 5, the open button on the "Anatomy" page might be somewhat unclear as to what it's opening. Severity: 2
3. [Error Prevention] On slide 11, it may be unclear to the user which "Add subsection +" button should be pressed when multiple identical buttons are so close to each other. Severity: 2

4. [User Control and Freedom] On the front of the "Anatomy" page, there is no button to allow the user to more easily export and/or share the notes. Even if this has to be simulated, it would probably be a solid addition to perceived usability. Severity: 2
5. [Flexibility and Ease of Use] [Help Users Recognize, Diagnose, and Recover from Errors] How will sections be edited by the user? There is no clear way to delete sections, or to change their position or title. Severity: 3
6. [Flexibility and Ease of Use] Having one solid color scheme for subsections could make it hard for users to differentiate information between sections. Severity: 1
7. [User Control and Freedom] There is no search bar option. Users may struggle to navigate large quantities of notes. Applies to searching for documents as well as subjects within the note document. Severity: 0
8. [User Control and Freedom] [Match Between System and Real World] Slide 18 shows the expanded image, along with an image edit button. However, it's unclear what functions this edit button will accomplish. Along with this, a pencil icon may not be a good choice to represent adding/deleting images. Severity: 2
9. [User Control and Freedom] [Help Users Recognize, Diagnose, and Recover from Errors] There's no way to undo anything. This would be needed for subjects, chapters, sections, text content, and images. Severity: 3
10. [Aesthetic and Minimalist Design] The slide prototype is entirely in grayscale. Adding color would improve the design aesthetically, and could also allow us to communicate information to the user. Severity: 1
11. [Flexibility and Ease of Use] [Visibility of System Status] There is no way to expand all or collapse all sections. This would help users have a better idea of how much material they have left when studying a note document. Severity: 1
12. [Flexibility and Ease of Use] [Recognition vs. Recall] The add image text is dull and blends in with the background. Severity: 1

Group reflection:

Our group went through each page of the project prototype multiple times individually, using Nielsen's list of heuristics to quantify the severity of problem areas and record them. What seemed to be common issues among our prototype revolved around the heuristics, "Flexibility and Ease of Use" and "User Control and Freedom". Many of the issues we found during individual evaluation were related to the same broader problems. These problems ranged from not considering user errors, or missing features that are important for a variable editor where information often changes. Oftentimes multiple issues were caused by the same missing feature. For example, the accidental addition or deletion of subsections would be extremely inconvenient in our current layout. Selecting the incorrect image would also take many steps to correct. However, these issues could all be solved by an undo button. This exercise was helpful in allowing us to identify agreed on problem areas and focus on the most important ones. By analyzing the consolidated list of problems, we can better understand the flaws in our design responsible for causing them.