

Software Prototype Evaluation

CS 345-346

Problem 2 : ClassNote Taking Application

Group 18

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1 Prototype Overview

The prototype has been attached along with this evaluation report.

We have made a **medium fidelity, vertical prototype**, as we have not used any actual programming language to create it, but interaction is simulated in the prototype.

These interactions occur when certain buttons are clicked. For a demonstration of how these work, visit the following link :

The link to the prototype : shorturl.at/fjINO

2 Task Descriptions

Assessing various factors, we chose to evaluate our prototype using **cognitive walkthrough**. Considering the **representative use cases** illustrated by our prototype, we thought of relevant scenarios where our application could be used. We asked our evaluators to perform the following tasks, and provide detailed reports to **judge the usability** of the system (at the end of each task description are the questions we asked our evaluators to think about while preparing their reports):

2.1 Use Case 1: Search for Notes created on a given date

- Log in to the application using your **user credentials** (username and password).
- Navigate to the Notebook in which you want to **search** for Notes.
- Find the **date input field** and enter the desired **creation date**.
- Locate the desired Note in the search results and open it.

2.1.1 Video Demonstration Link

Search By Date — Click Here : shorturl.at/mpqEQ

2.1.2 Questions

1. While logging in, were the input fields **clearly visible**, and was their naming appropriate?
2. Was it **easy to distinguish** between a Note and a Notebook?
3. Was the search bar **easy to locate** and did it **indicate its function** appropriately?
4. Were the **changes on the screen** upon entering the creation date **indicative of the function** being performed?
5. Was the **displayed information sufficient** to identify the desired Note?

2.2 Use Case 2: Insert an image in Note

- Log in to the application using your **user credentials** (username and password).
- Navigate to the desired Note given its location.
- Bring the **cursor to the position** at which the image is to be inserted.
- Locate the **Add Image** button and select the option to **upload image from device**.
- Select the appropriate image file from your system.

2.2.1 Video Demonstartion Link

Insert Image — Click Here : shorturl.at/ghwNW

2.2.2 Questions

1. Did you **accidentally open an incorrect Note/Notebook**? If yes, was the mechanism to go back to your **previously visited Notebooks** convenient?
2. Was the button to insert the image **clearly visible**?
3. Was **specifying the position** at which the image is to be inserted intuitive?
4. Did the Note's structure **change in the desired manner** upon inserting the image?

General questions

- Was there any component in the interface whose **function wasn't properly understood**?
- Did the application provide **sufficient feedback** to indicate that the **intended action** was being performed?
- Did the interface **adhere to the conventions** used in real world applications?
- Was the application design **appropriate** for a note taking application?

3 Evaluation reports

We asked **three** people to scrutinize our prototype, **inspect its usability**, and provide us with detailed reports. These reports are given below, along with a **comprehensive summary** in the end, which encapsulates everything our evaluators had to say about our prototype.

3.1 Report by Yash Bhagat: Design Intern at CRED

3.1.1 Use Case 1

1. While logging in, were the input fields clearly visible, and was their naming appropriate?
 - Yes, both the Login and Sign Up screens had **clearly named input fields** - Username, Password and Email - right at the centre of the screen.
2. Was it easy to distinguish between a Note and a Notebook?
 - Yes. Whenever a Notebook was opened, there were **different icons for Notes and Notebooks**. The Note icon looked like a page and the Notebook icon resembled a book, making it **quite easy** to identify each item.
3. Was the search bar easy to locate and did it indicate its function appropriately?
 - In the first glance, I **could not find the search bar for creation date**. However, the "Text phrase to search" bar was **clearly visible** in the top bar, and the "Creation Date" bar was **right beside** it.
4. Were the changes on the screen upon entering the creation date indicative of the function being performed?
 - Yes, **very evidently**. Immediately after entering the date and hitting enter, the search result - a list of Notes - was displayed.
5. Was the displayed information sufficient to identify the desired Note?
 - Yes. When the search was complete, **every Note was displayed along with its location** and two other fields. The Note's location made it **very easy to identify** whether that Note was the one I was looking for.

3.1.2 Use Case 2

1. Did you accidentally open an incorrect Note/Notebook? If yes, was the mechanism to go back to your previously visited Notebooks convenient?
 - No, I **did not open incorrect Notes/Notebooks**. All the items were **clearly named**, and choosing the correct item to open was **not very difficult**.
2. Was the button to insert the image clearly visible?
 - **Not at first**. Only when I carefully looked at the top bar did I find the "Add Image" button.
3. Was specifying the position at which the image is to be inserted intuitive?
 - Yes. I just had to **move the write cursor to wherever I wanted** to insert the image. Most text editors like MS Word and Google Docs have a similar feature to insert images.
4. Did the Note's structure change in the desired manner upon inserting the image?
 - Similar to my previous answer, **the structure changed as expected** - identical to how the formatting in MS Word or Google Docs changes upon inserting an image.

3.1.3 General Questions

1. Was there any component in the interface whose function wasn't properly understood?
 - The "Creation Date" search bar seemed **a little ambiguous** to me at first. Only when I was asked to search for Notes by their creation date I realised what that bar was for.
2. Did the application provide sufficient feedback to indicate that the intended action was being performed?
 - Yes. Every action was **performed quickly**. Navigating through Notebooks, inserting an image, searching for Notes and all other actions swiftly completed their actions and showed **immediate results**, indicating **progress and completion**.
3. Did the interface adhere to the conventions used in real world applications?
 - **Most definitely yes**. All the screens - Login, Sign Up, Notebook view, Notes view, Homescreen etc - resembled some or the other application that I have used earlier. The Login screen looked identical to Login screens used by popular social media websites, the Notebook view screen looked like any other device's folder view etc.
4. Was the application design appropriate for a note taking application?
 - **Not really**. I would expect a note taking application to use **lighter shades**. This prototype used a black-green colour theme, and although it was **visually appealing**, I would expect such a theme from entertainment apps like music apps and gaming apps.

3.2 Report by Nikunj Heda: Student at IIT Guwahati

3.2.1 Use Case 1

1. While logging in, were the input fields clearly visible, and was their naming appropriate?
 - Yes, Both the input fields "Username" and "Password" are **clearly visible** and the naming **follows the globally accepted convention**.
2. Was it easy to distinguish between a Note and a Notebook?
 - I would say there is a **fair distinction between the note and notebook**, as the icons of both of them somewhat represent the actual note and notebook, although the notebook icon could have been better.
3. Was the search bar easy to locate and did it indicate its function appropriately?
 - Yes, the search bar was easy to locate and the dd/mm/yyyy format was a **very good idea** to indicate its functionality.
4. Were the changes on the screen upon entering the creation date indicative of the function being performed?
 - Yes, as soon as the filter was applied all the notes created on that particular date were displayed.
5. Was the displayed information sufficient to identify the desired Note?
 - Yes, when the information was displayed it also included the date of creation, date modified, its location along with its name.

3.2.2 Use Case 2

1. Did you accidentally open an incorrect Note/Notebook? If yes, was the mechanism to go back to your previously visited Notebooks convenient?
 - Yes, the back arrow button present is **very handy** to navigate through the previously visited notes and notebooks.
2. Was the button to insert the image clearly visible?
 - Yes, the button for inserting an image was **clearly and distinctly visible** on the title bar of the application.
3. Was specifying the position at which the image is to be inserted intuitive?
 - This is **debatable** as some applications requires first clicking of the add image button and then choosing the position and some first choose the position first and then requires clicking of the add image button. Either way the prototype uses the one convention which is used by **popular text editors** like google docs.
4. Did the Note's structure change in the desired manner upon inserting the image?
 - Absolutely yes, as soon as the image was inserted the changes were reflected in the note content.

3.2.3 General Questions

1. Was there any component in the interface whose function wasn't properly understood?
 - No, all the components in the interface had clear functions and it was **easy to understand** for me.
2. Did the application provide sufficient feedback to indicate that the intended action was being performed?
 - Yes, the application was **pretty much responsive** and gave **instant responses** for any query which was given to the application.
3. Did the interface adhere to the conventions used in real world applications?
 - Yes, the interface used all the symbols/icons which are used in real world applications and were **soothing** to look at.
4. Was the application design appropriate for a Note taking application?
 - Yeah pretty much but, a **switch between dark and light mode** would have been an added plus. The file explorer **followed the convention** set by the real world applications and even the internal text editor was pretty much similar to MS Word.

3.3 Report by Parth Shah: Student at IIT Guwahati

3.3.1 Use Case 1

1. While logging in, were the input fields clearly visible, and was their naming appropriate?
 - The first screen which appeared when the application loaded was the login screen. It had two text fields both **appropriately indicating** the credential to be entered. All the buttons and links were **appropriately named**.
2. Was it easy to distinguish between a Note and a Notebook?
 - Yes. The tiles for Notes and Notebooks had **very different icons** and also **different colors** were used for the icon. They were **easy to distinguish and indicative** of the object they represented.
3. Was the search bar easy to locate and did it indicate its function appropriately?
 - Yes. There were two search bars, one for searching the text and one for searching the date. Both contained the text indicating their function and the search icon was **very helpful** to locate those elements. Also upon clicking on the date field, the format was displayed.
4. Were the changes on the screen upon entering the creation date indicative of the function being performed?
 - Upon entering the date and hitting enter the layout of the screen changed and a list of notes with **appropriate details** appeared indicating the function was **performed successfully**.
5. Was the displayed information sufficient to identify the desired Note?

- Yes the displayed information was **sufficient** to identify the desired note. The notes can be identified by their names but even in case of two notes with same name, the **location** can be used to distinguish between them.

3.3.2 Use Case 2

1. Did you accidentally open an incorrect Note/Notebook? If yes, was the mechanism to go back to your previously visited Notebooks convenient?
 - Yes, I did actually open an incorrect notebook by going back to the previous notebook was **easy** by **using the back buttons** provided in the top bar.
2. Was the button to insert the image clearly visible?
 - Only the top bar of the application contained buttons and after going through them one by one I located the "Add Image" button. It was **clearly visible** but **hard to locate**.
3. Was specifying the position at which the image is to be inserted intuitive?
 - At first it was **not clear**. I first inserted the image at the wrong position but then noticed the image was inserted at the position of the cursor by default which is the case with most of the **conventional** text editors.
4. Did the Note's structure change in the desired manner upon inserting the image?
 - Yes the image was inserted **at the desired location** and the content beneath it shifted downward **as intended**.

3.3.3 General Questions

1. Was there any component in the interface whose function wasn't properly understood?
 - All the components that I used while performing the task given were **well documented** and their functions were **clear**.
2. Did the application provide sufficient feedback to indicate that the intended action was being performed?
 - Yes the system was **very responsive**. Almost all the actions performed provided some kind of feedback and the feedback was **instant**.
3. Did the interface adhere to the conventions used in real world applications?
 - The interface did **adhere to the conventions** used in real world applications. The positioning on the buttons was also **in accordance** with those used in conventional applications. **Standard symbols** were used in the interface. The icon for Notebook **could have been better**.
4. Was the application design appropriate for a Note taking application?
 - The design was **appropriate** but many improvements can be made in the design such as **different view mode** for notes instead of a single double page view. Also the **margins can be increased** as it will make the application look **cleaner**.

Summary

Carefully going through all the evaluation reports, we inferred the following conclusions:

- Every evaluator gave us a **positive feedback** regarding our prototype. Every one of them faced **a few inconveniences** although **the overall experience was quite smooth**.
- **Login/Sign Up** was **very neat, simple, clean and efficient**. The design of those **screens was minimal**, yet the information provided was **sufficient** to understand how to perform the necessary function.
- The Notebook view was designed well. Although the icons for Note and Notebook were vastly different, our evaluators felt that we could have chosen **better symbols** instead. One evaluator felt that the "Creation Date" bar could have been better as well. Navigating through different Notebooks and opening Notes was really convenient, which was possible through the use of back and forward buttons. The **sidebar looked nice** too - showing recently opened Notes and buttons to create new Notes and Notebooks.
- Two of the three evaluators wanted a **support of dark mode switch** in the interface, it depends on the personal choice of the user as sometimes dark mode is used by them for getting a lesser eye strain whereas colors are more distinct in the light mode. Hence a choice should be given to the users so that they could use the mode that suits them.
- Inside an opened Note, the margin could have been wider. Also, the "Add Image" button was not visible at first to one evaluator. This would have been the case with other editing options as well. The formatting and alignment changed visibly upon inserting an image. As is often the case, uploading external elements in a file distorts it, and realigning the existing effort takes some trial-and-error based effort.
- The search results were **displayed effectively**. Along with the Note name, all the **necessary details** were printed, and identifying the Notes was **very easy**. The location field especially was **very helpful**, and one of our evaluators remarked that providing the location upon searching would enable the user to not only open the displayed Note, but also navigate to the Notebooks present in the filepath and **view other relevant Notes** if necessary. These other relevant Notes would not appear if they were created on a different date, and giving the location takes care of this.