notE is a simple, non-invasive online account information management notebook.

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PROBLEM

Seniors

- tend to have less secure online habits
- are targeted by many online scams
- have difficulty adapting to new technologies
SOLUTION

Seniors

- learn by **pattern matching**
- value **simplicity**

**notE** is a **simple, non-invasive** online account information management notebook
Initial Paper
Prototype

Cover
Index Page
Account Page
Notification Page
Light Notifications
Linked Pen
Storing, Generating, and Updating Passwords

Giving Guidance After an Account Has Been Compromised
Task 1: Storing, generating, and updating passwords

Use facial recognition to securely unlock

Use index page to locate next available page

Use available page to record account information
Task 1: Storing, generating, and updating passwords

Confirmation of entry with a green light

Index page automatically updates for quick search
Task 1: Storing, generating, and updating passwords

Yellow light indicates minor account issue

Yellow light shows on the index page

Prompt to update password
Task 2: Giving Guidance After an Account Has Been Compromised

Red light indicates severe account issue

Red light shows on the index page

Red light shows on page and notification provides more information
Task 2: Giving Guidance After an Account Has Been Compromised

Message shows that there will be someone to contact them later.

Greenlight shows on page indicating no further security issues.
TESTING PROCESS

2 heuristic evaluations + 3 usability tests
HEURISTIC EVALUATION

Identifying as many major usability issues as possible before conducting usability tests
## Testing Process: Heuristic Evaluation

<table>
<thead>
<tr>
<th>Participants</th>
<th>Method</th>
<th>Issues</th>
</tr>
</thead>
</table>
| - Students currently taking CSE 440  
- Conducted inside and outside of class | - Brief introduction of our design  
- Give them scenarios and observed  
- Focused on violations of Nielsen's heuristics for interface design | - Lack of help + documentation |
USABILITY TESTING

Testing the simplicity and intuitiveness of our design among our target audience
Testing Process: Usability Testing

Participants
- Seniors found in the library
- Familiar with technology

Method
- Brief introduction of our design
- Give them scenarios and observe
- Focused on points of frustration and intuitiveness

Issues
- Initially gave insufficient explanation of design
- Over-corrected and gave too much
**Testing Results: Main Takeaways**

<table>
<thead>
<tr>
<th>Heuristic Evaluation</th>
<th>Usability Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Help and documentation</td>
<td>• Level of documentation and instruction</td>
</tr>
<tr>
<td>• Consistency</td>
<td>• Need more resemblance to a notebook</td>
</tr>
<tr>
<td></td>
<td>• Intuitiveness</td>
</tr>
</tbody>
</table>
Major Changes: Change Index to traditional table of contents
**Major Changes:** Change input boxes to regular lines

**Before**

- Website
- Username
- Password
- Email
- Security Questions
- Additional Sites

**After**

- Website
- Username
- Password
- Email
- Security Questions / Additional
Major Changes: Add screen on the front cover

Before

After
Major Changes: Change help section to high level topics

Before

After

1. Using the note pen
2. Personal Information Management
3. Sharing your account information
4. Accessing your account information
5. Tracking your account information
Task 1: Storing, generating, and updating passwords

- Use facial recognition to secure and unlock
- Use index page to locate next available page
- Use available page to record account information
Task 1: Storing, generating, and updating passwords

Offer password suggestions

Confirmation of entry with a green light

Index page automatically updates for quick search
Task 1: Storing, generating, and updating passwords

Yellow light indicates minor issue with an account

Yellow light shows affected account

Offer suggested password for the update
Task 2: Giving Guidance After an Account Has Been Compromised

Red light indicates major account issues

Red light shows on index page

Red light shows on page. Notification provides more information
Task 2: Giving Guidance After an Account Has Been Compromised

Red light shows on page. Notification provides more information

Notebook will contact help and suggests other steps
Task 1: Storing, generating, and updating passwords

Use facial recognition to secure and unlock

Use index page to locate next available page

Enter information on the available page
**Task 1:** Storing, generating, and updating passwords

- Offer password suggestions
- Confirmation of entry with a green light
- Index page automatically updates for quick search
Task 1: Storing, generating, and updating passwords

Remind to change password

Yellow light shows on index page

Offer suggested password for the update
Task 2: Giving Guidance After an Account Has Been Compromised

Red light indicates severe account issues

Red light shows on index page
Task 2: Giving Guidance After an Account Has Been Compromised

Red light shows on page. Notification provides more information.

Notebook will contact help and suggests other steps.

Notebook will contact help and suggests other steps.

NOTIFICATIONS

Your account may be compromised. To have a representative contact you to assist you with account recovery, press the “help” button below.

Other suggested steps:
1. Change your password immediately
2. Notify people who may be contacted by that account
3. Browse your account activity and identify any other suspicious activity

NOTIFICATIONS

Thanks for confirming the issue. Someone from the company will contact you shortly.
SUMMARY

For Process

- Iterative refinement and revision
- Focus on Participants’ wants and needs
- Different testing processes and their purposes
- Simplicity is key
THANK YOU
Q&A
Celeste: 33%, designed slides, wrote half of slides, formatted pictures, made minor revisions on the entire document

Ethan: 0%,

Bill: 33%, wrote some slides

Augustina: 33%, refined the slides, helped to write some elements/ task walk through, worked on some style things, and participated in the discussion, edited some minor changes