



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

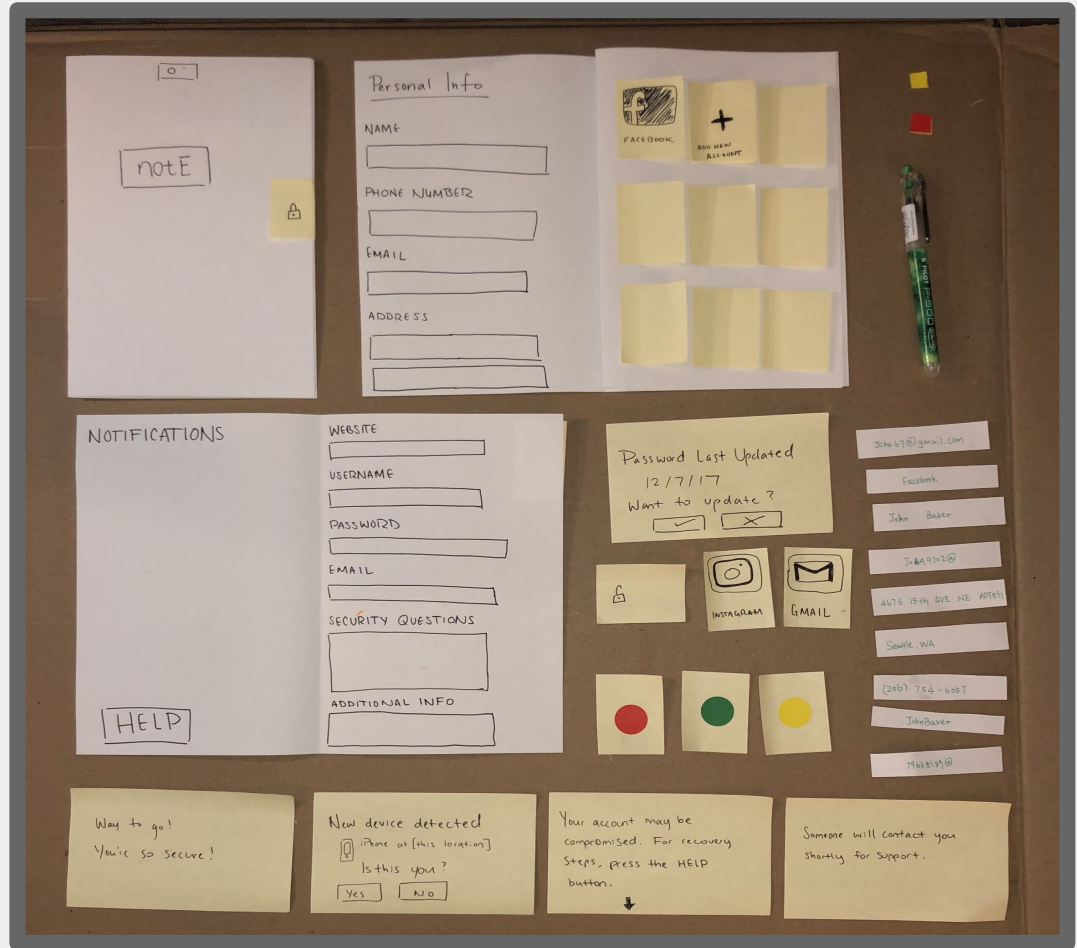
Index Page

Account Page

Notification Page

Light Notifications

Linked Pen



MAIN TASKS

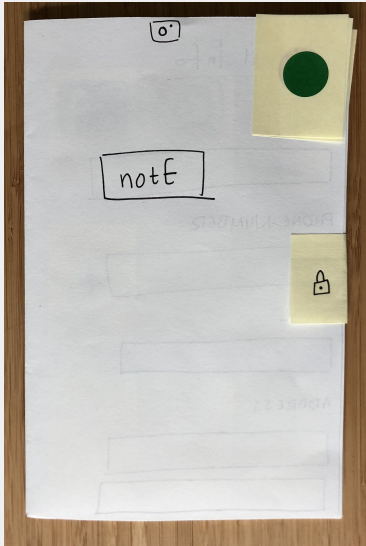


Storing, Generating, and
Updating Passwords

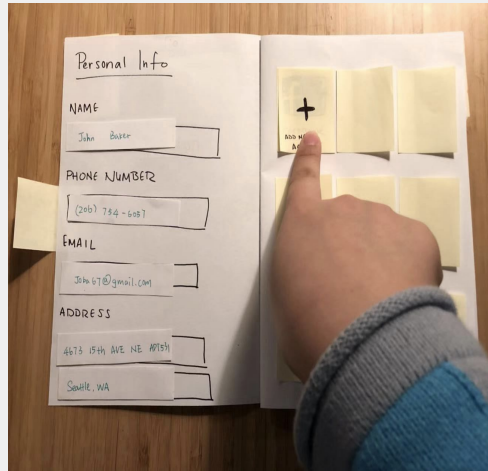


Giving Guidance After an Account
Has Been Compromised

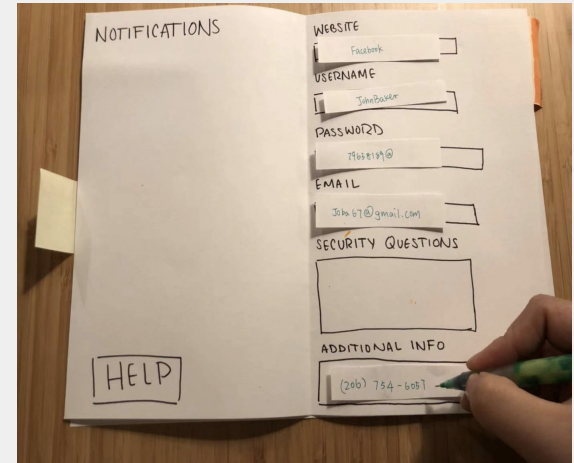
Task 1: Storing, generating, and updating passwords



Use facial recognition
to securely unlock

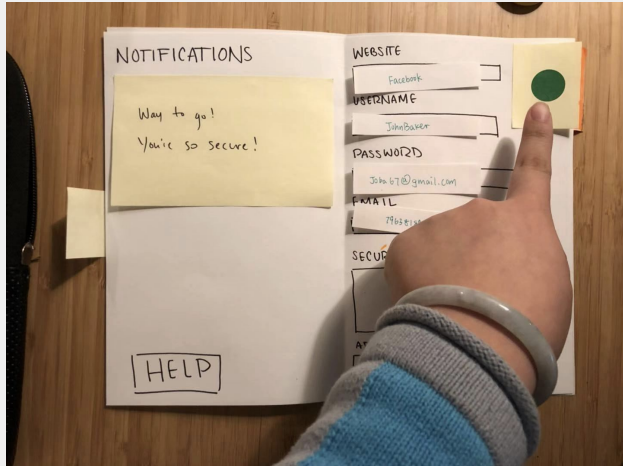


Use index page to locate
next available page

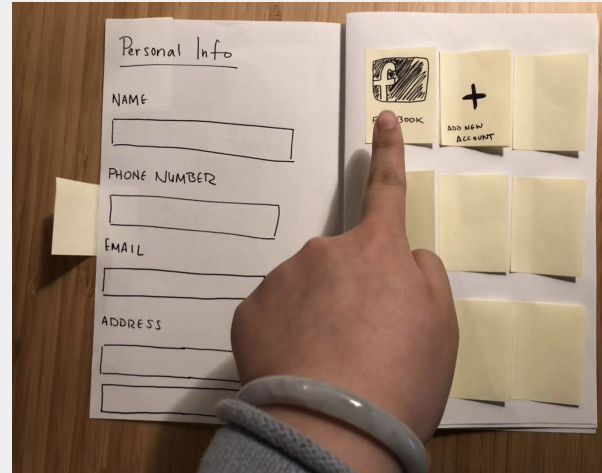


Use available page to
record account information

Task 1: Storing, generating, and updating passwords

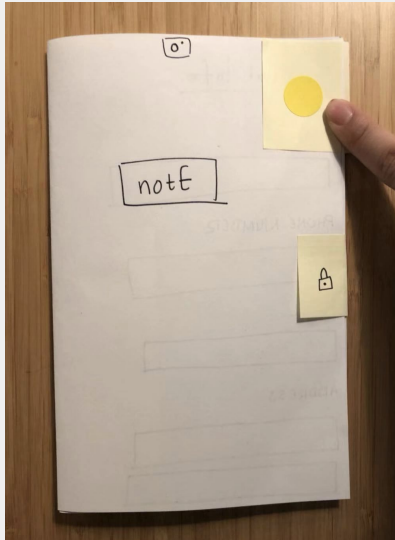


Confirmation of entry
with a green light

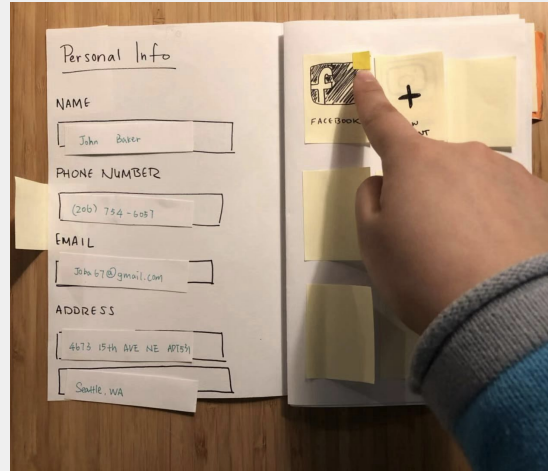


Index page automatically
updates for quick search

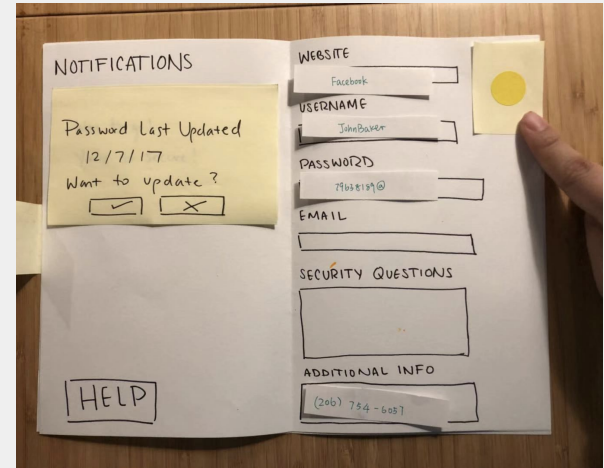
Task 1: Storing, generating, and updating passwords



Yellow light indicates minor account issue

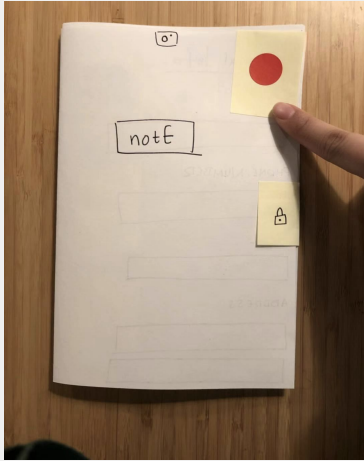


Yellow light shows on the index page

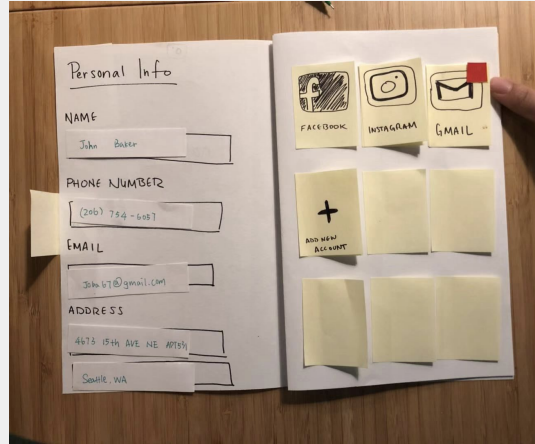


Prompt to update password

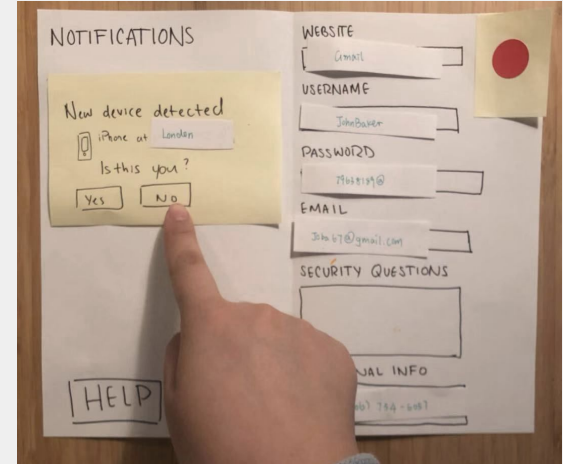
Task 2: Giving Guidance After an Account Has Been Compromised



Red light indicates
severe account issue

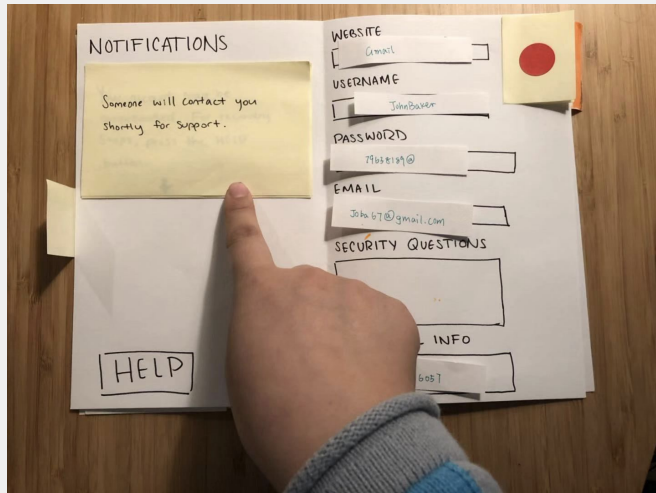


Red light shows on the
index page

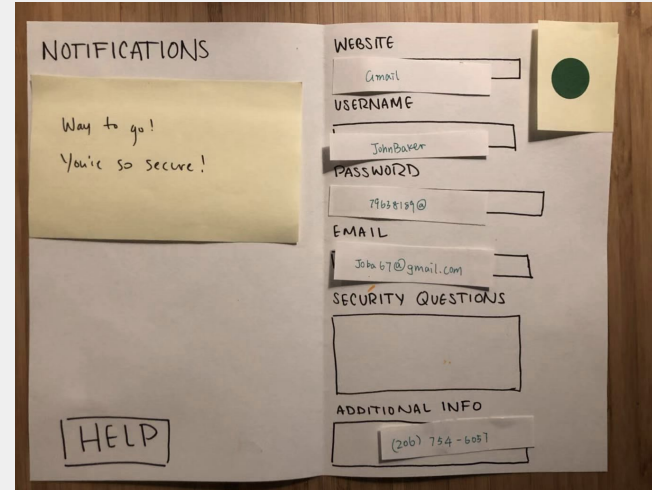


Red light shows on page and
notification provides more
information

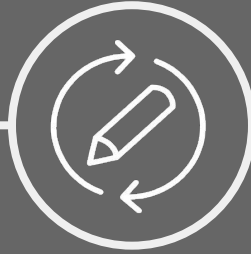
Task 2: Giving Guidance After an Account Has Been Compromised



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

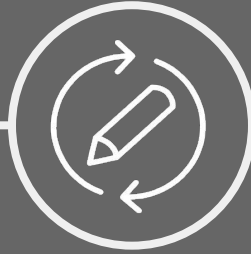


Greenlight shows on page indicating no further security issues.



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



Participants

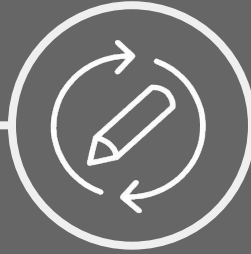
- Students currently taking CSE 440
- Conducted inside and outside of class

Method

- Brief introduction of our design
- Give them scenarios and observed
- Focused on violations of Nielsen's heuristics for interface design

Issues

- 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



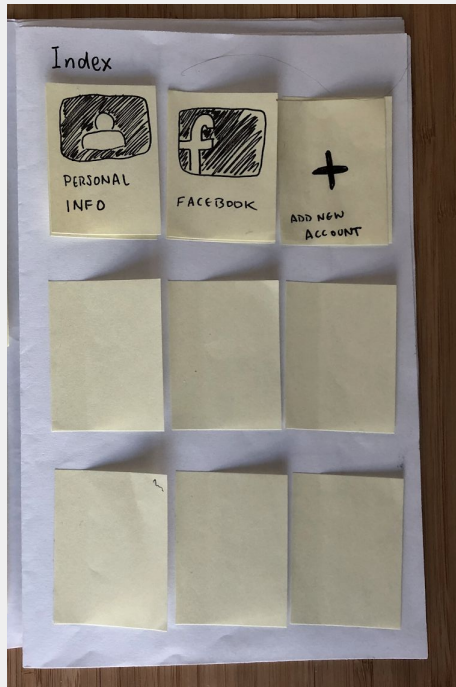
Heuristic Evaluation

- Help and documentation
- Consistency

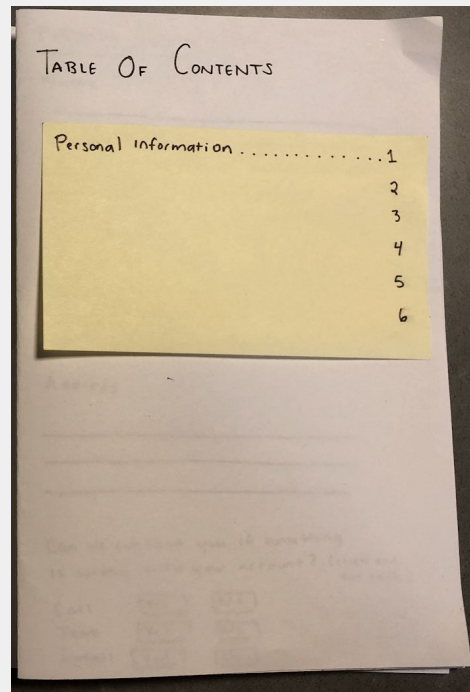
Usability Testing

- Level of documentation and instruction
- Need more resemblance to a notebook
- Intuitiveness

Major Changes: Change Index to traditional table of contents



Before



After

Major Changes: Change input boxes to regular lines



Hand-drawn form titled "Before" with the following fields:

- WEBSITE * (with a rectangular input box)
- USERNAME (with a rectangular input box)
- PASSWORD (with a rectangular input box)
- EMAIL (with a rectangular input box)
- SECURITY QUESTIONS (with a rectangular input box)
- ADDITIONAL NOTES (with a rectangular input box)

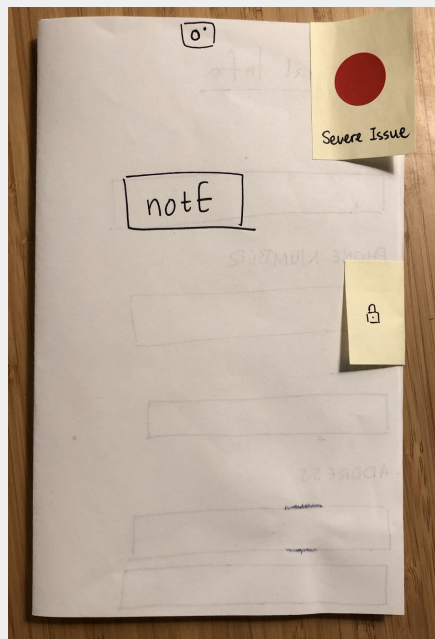
Before

Hand-drawn form titled "After" with the following fields:

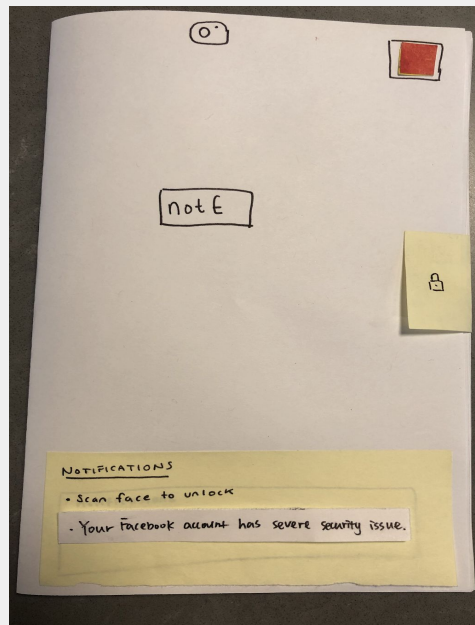
- Website (with a horizontal line input box, containing "Facebook")
- Username (with a horizontal line input box, containing "JohnBaker")
- Password (with a horizontal line input box, containing "JoB49702@")
- Email (with a horizontal line input box, containing "Joba67@gmail.com")
- Security Questions / Additional (with multiple horizontal line input boxes)

After

Major Changes: Add screen on the front cover

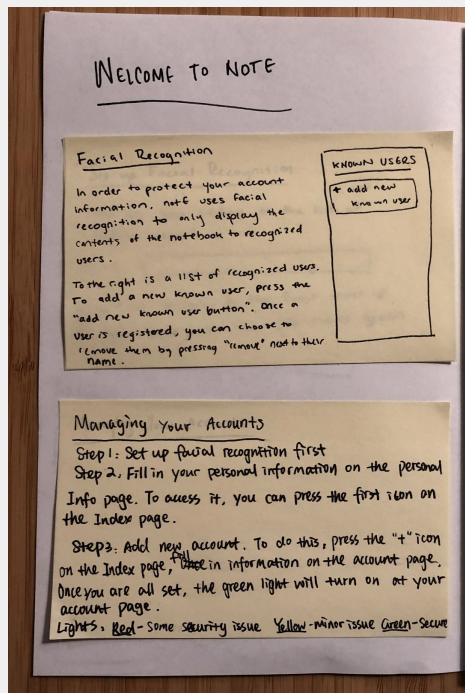


Before

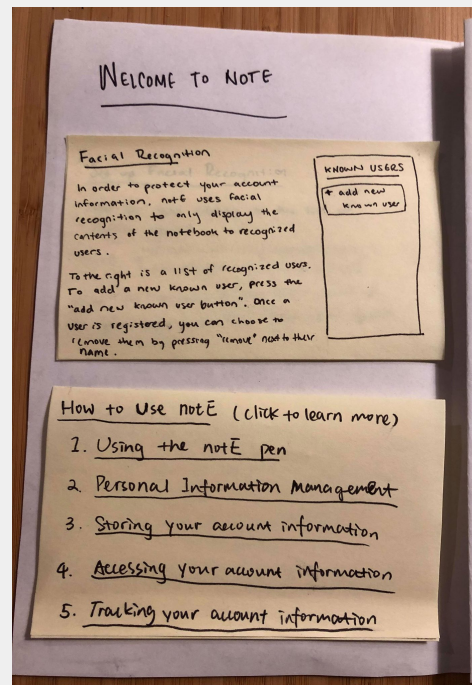


After

Major Changes: Change help section to high level topics



Before



After

Final Paper Prototype

Cover

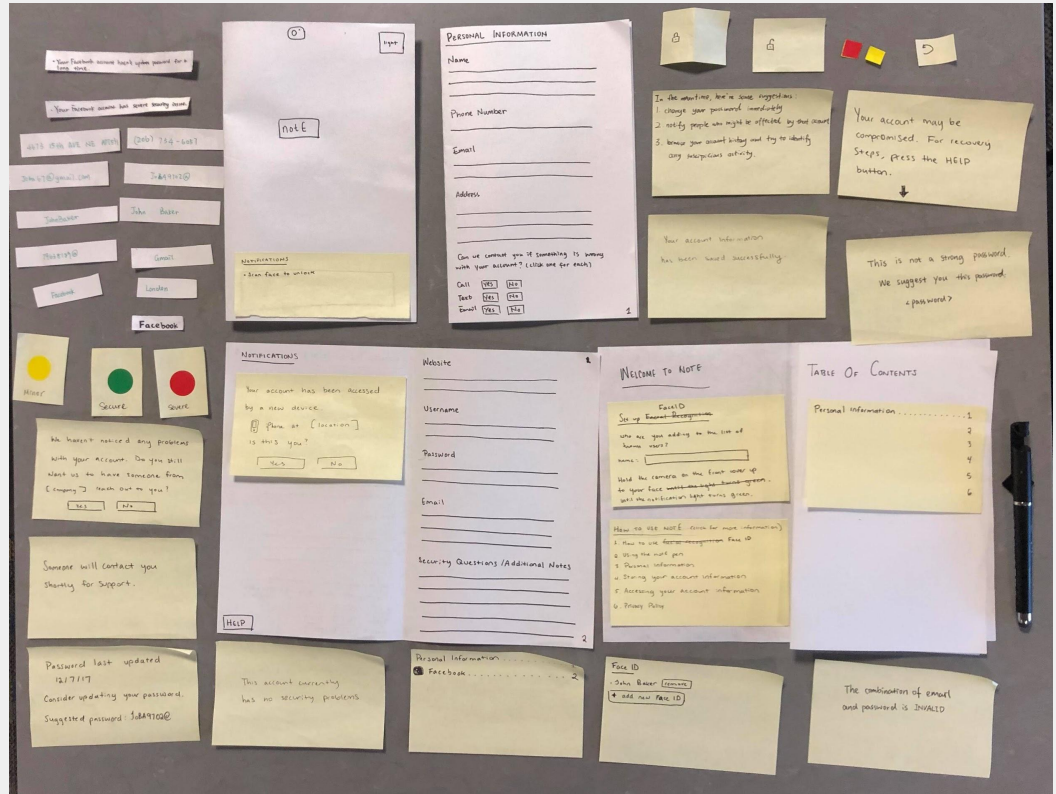
Index Page

Account Page

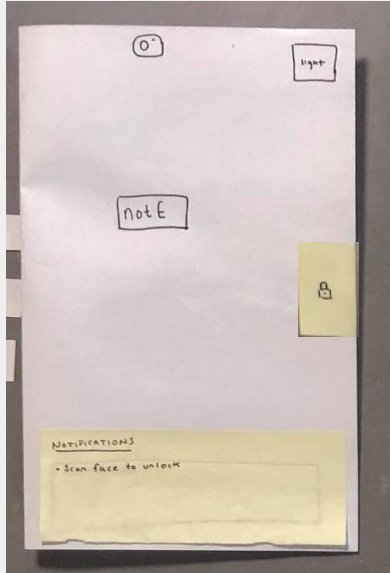
Notification Page

Light Notifications

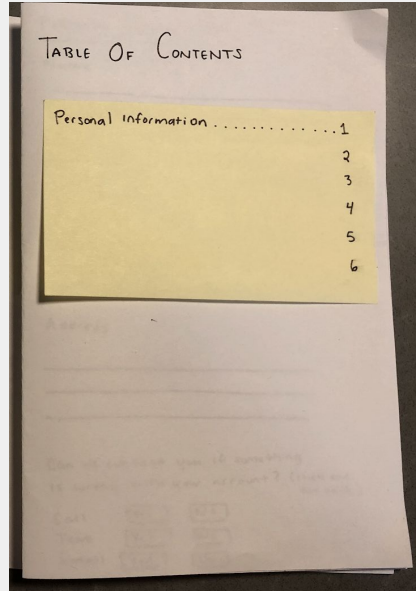
Linked Pen



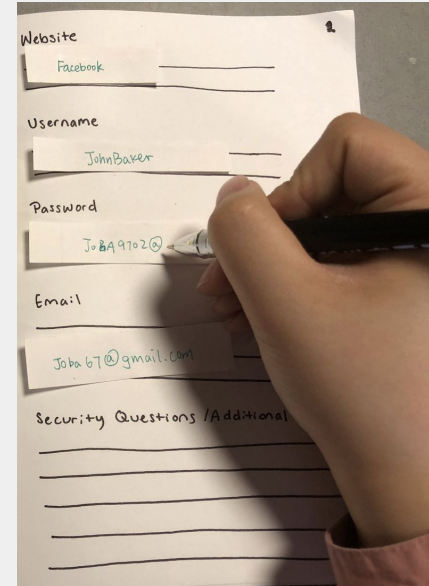
Task 1: Storing, generating, and updating passwords



Use facial recognition to secure and unlock

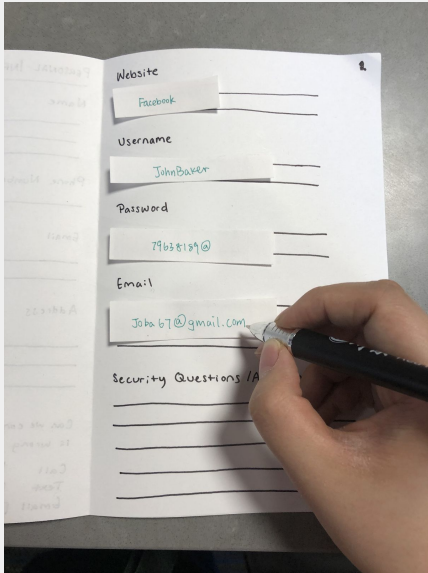


Use index page to locate next available page

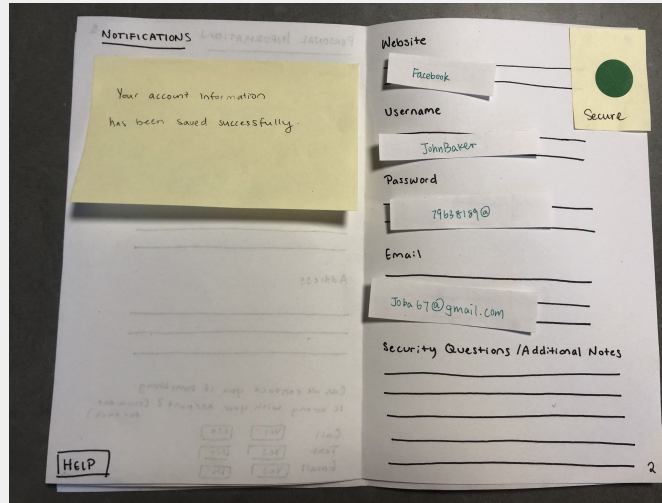


Use available page to record account information

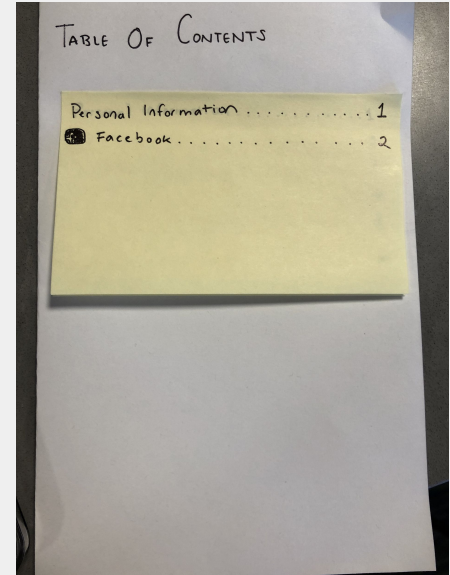
Task 1: Storing, generating, and updating passwords



Offer password suggestions

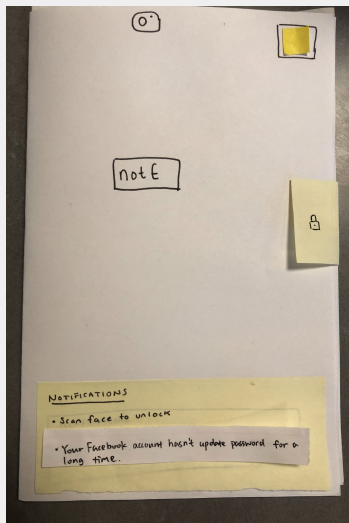


Confirmation of entry with a green light

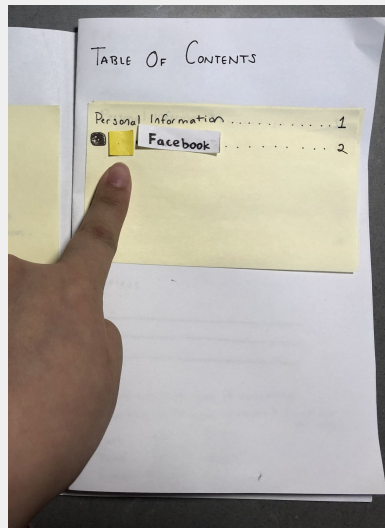


Index page automatically updates for quick search

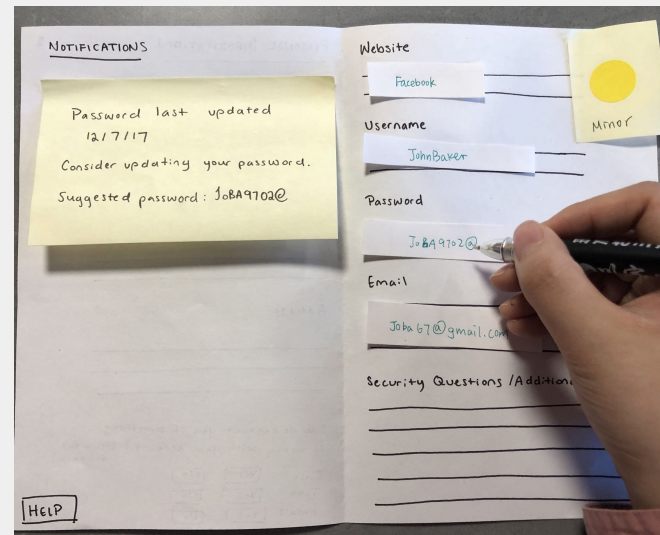
Task 1: Storing, generating, and updating passwords



Yellow light indicates minor issue with an account

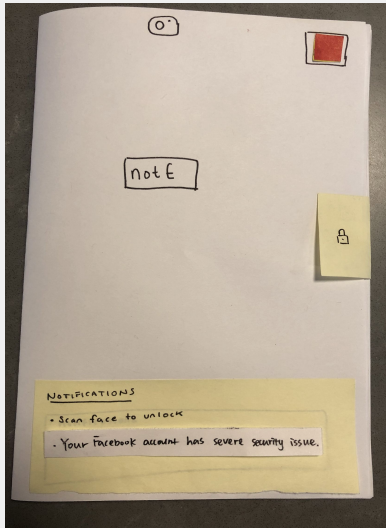


Yellow light shows affected account

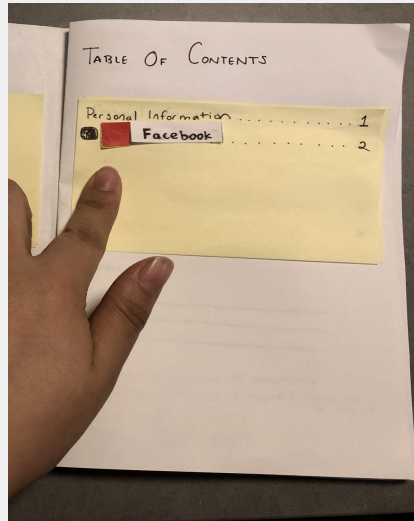


Offer suggested password for the update

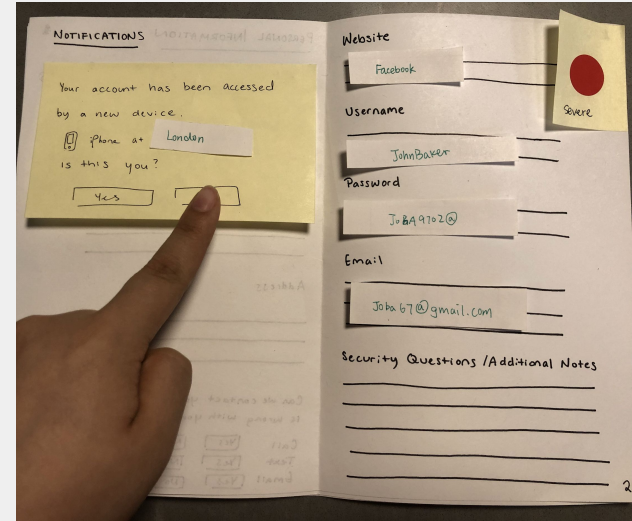
Task 2: Giving Guidance After an Account Has Been Compromised



Red light indicates major account issues

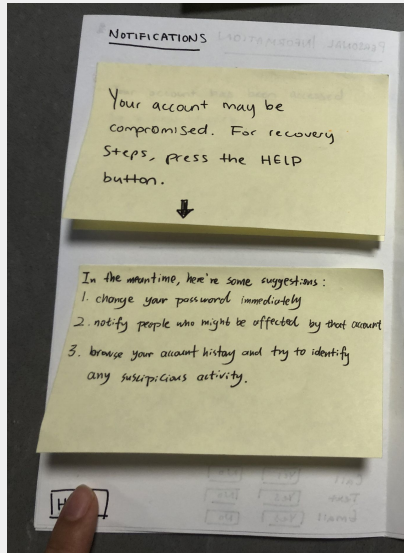


Red light shows on index page

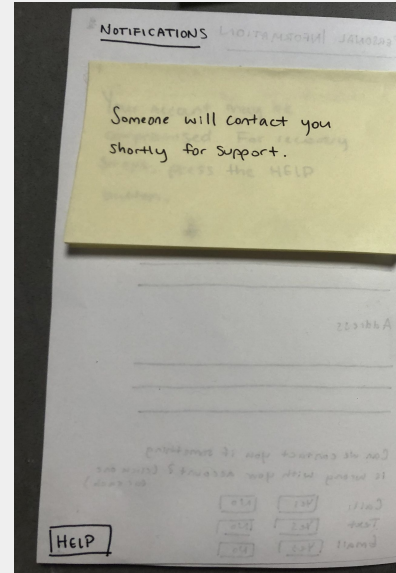


Red light shows on page. Notification provides more information

Task 2: Giving Guidance After an Account Has Been Compromised

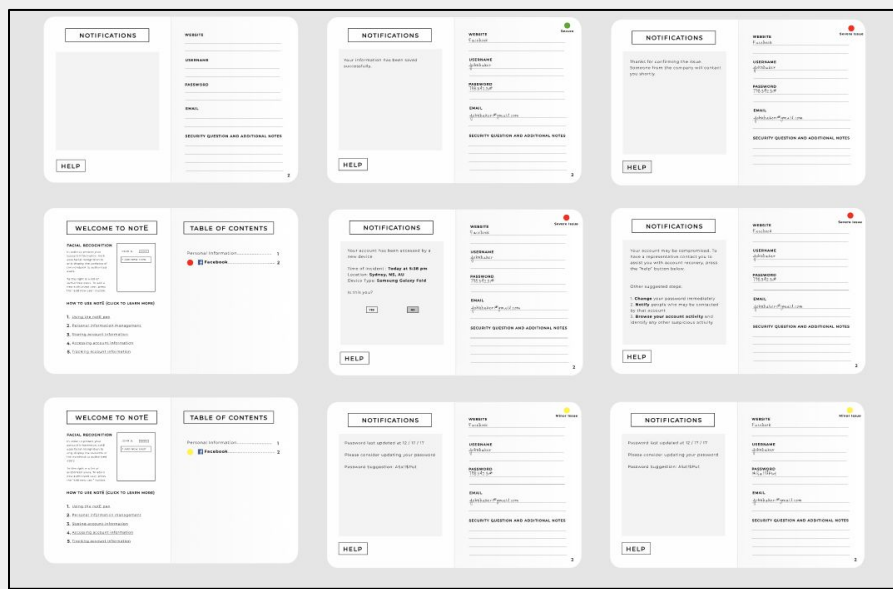


Red light shows on page. Notification provides more information

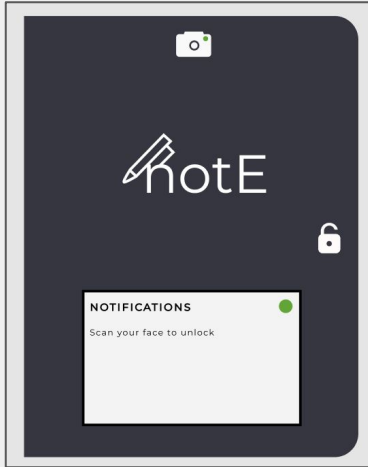


Notebook will contact help and suggests other steps

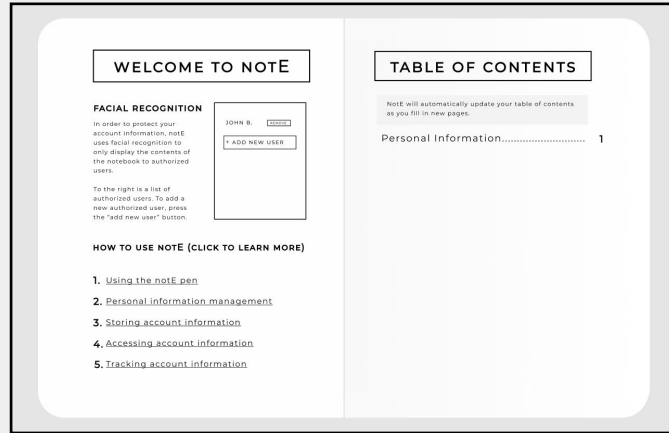
Digital Mockup: Overview



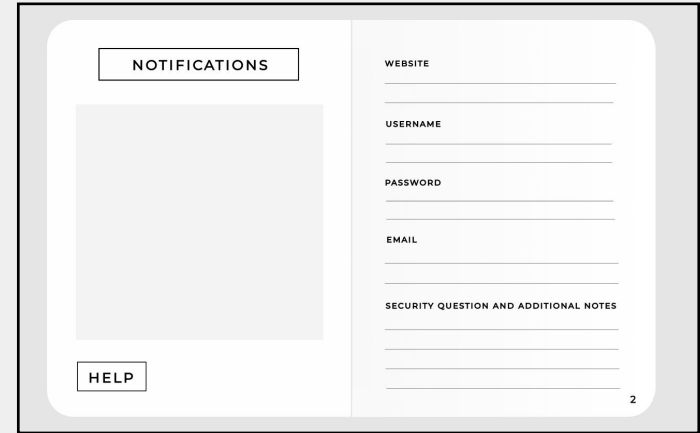
Task 1: Storing, generating, and updating passwords



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



NOTIFICATIONS

Suggested Password: 7983423@

HELP

WEBSITE
Facebook

USERNAME
JohnDaker

PASSWORD

EMAIL

SECURITY QUESTION AND ADDITIONAL NOTES

2

Offer password suggestions

NOTIFICATIONS

This account currently has no security issues.

HELP

WEBSITE
Facebook

USERNAME
JohnDaker

PASSWORD
7983423@

EMAIL
JohnDaker@gmail.com


SECURITY QUESTION AND ADDITIONAL NOTES

2

Confirmation of entry with a green light

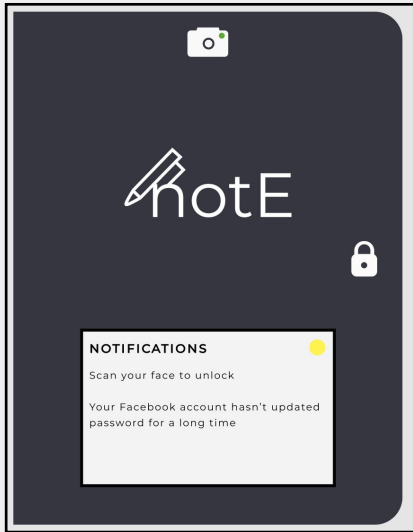
TABLE OF CONTENTS

NoteE will automatically update your table of contents as you fill in new pages.

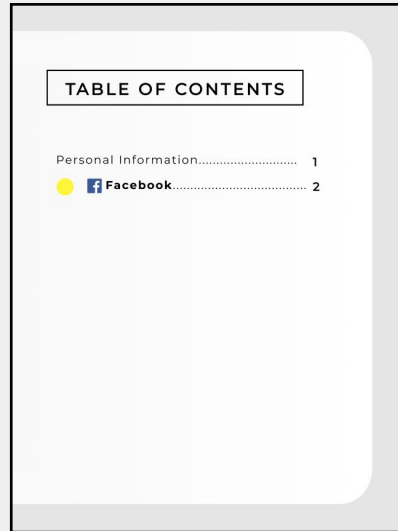
Personal Information.....	1
 Facebook.....	2

Index page automatically updates for quick search

Task 1: Storing, generating, and updating passwords



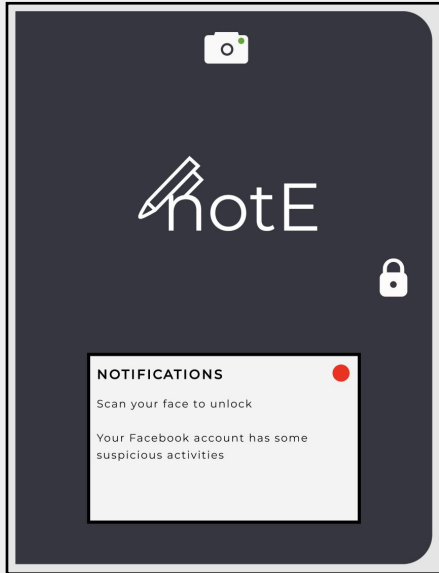
Remind to change password



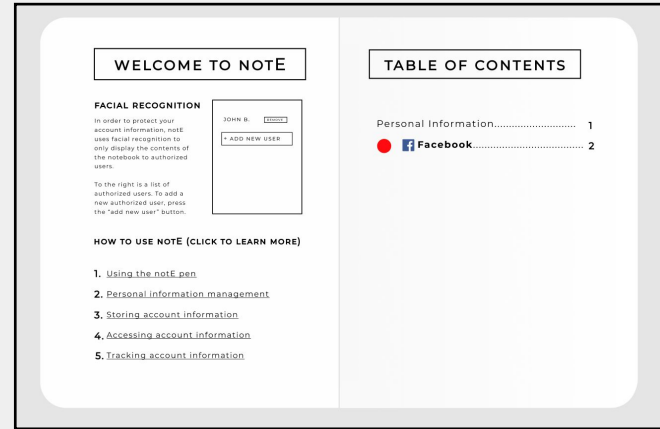
Yellow light shows on index page

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



NOTIFICATIONS

Your account has been accessed by a new device

Time of incident : **Today at 5:38 pm**
Location: **Sydney, NS, AU**
Device Type: **Samsung Galaxy Fold**

Is this you?

WEBSITE
Facebook

USERNAME
johnbaker

PASSWORD
7983423@

EMAIL
johnbaker@gmail.com

SECURITY QUESTION AND ADDITIONAL NOTES

Severe Issue

HELP

2

Red light shows on page.
Notification provides more
information

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

HELP

Notebook will contact
help and suggests
other steps

NOTIFICATIONS

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

HELP

Notebook will contact
help and suggests
other steps



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