



note

**Celeste Cayetano** Ethan Cui

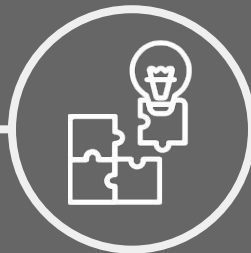
**Bill Phung** Augustina Liu



## 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

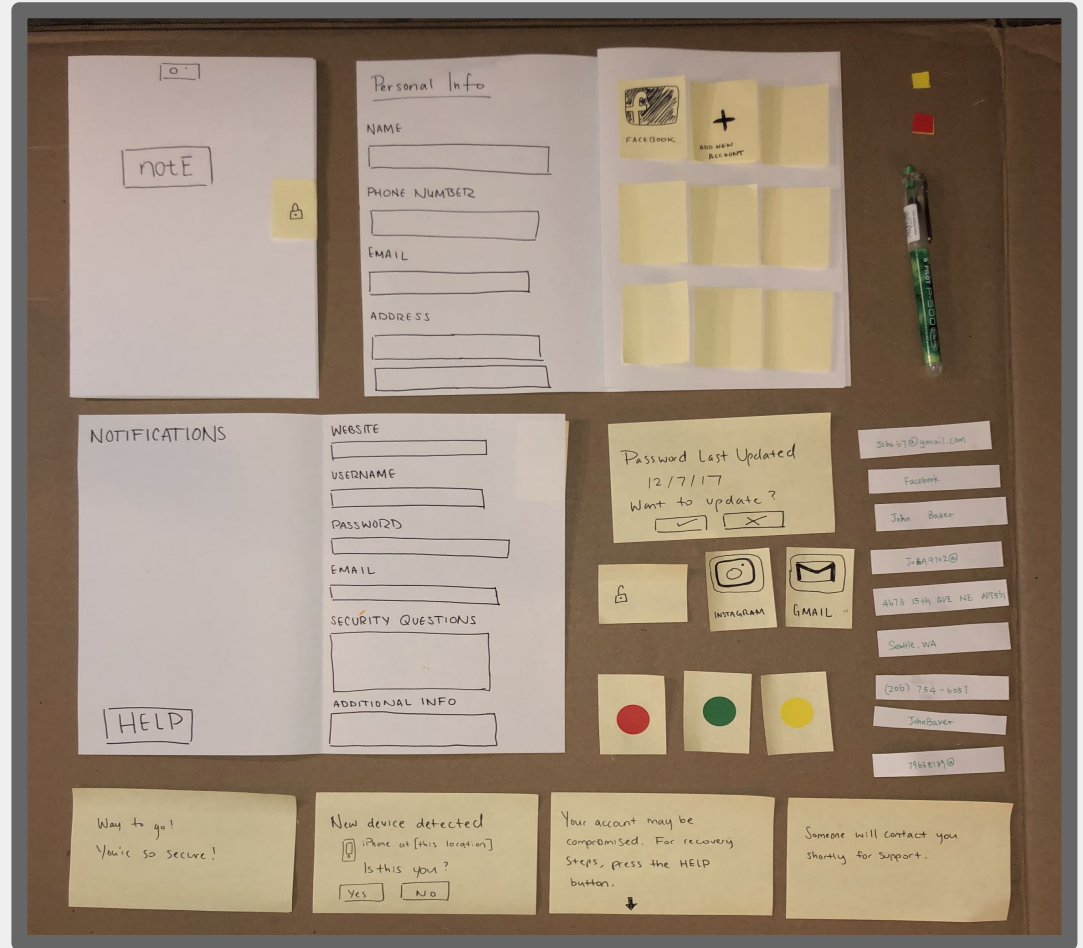
Index Page

Account Page

Notification Page

Light Notifications

Linked Pen



# MAIN TASKS

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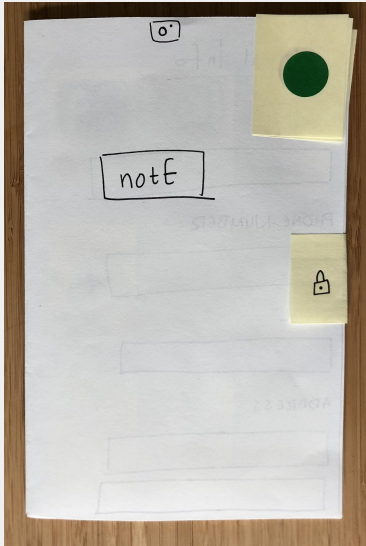


Storing, Generating, and  
Updating Passwords

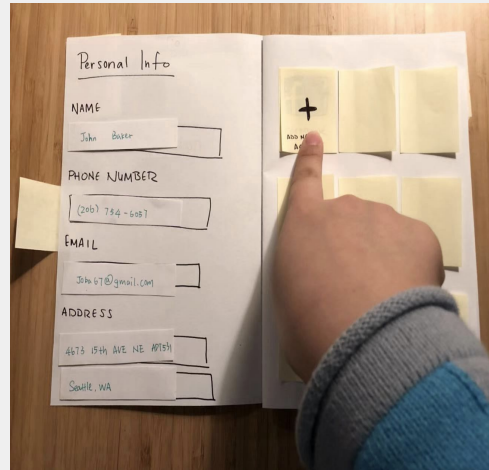


Giving Guidance After an Account  
Has Been Compromised

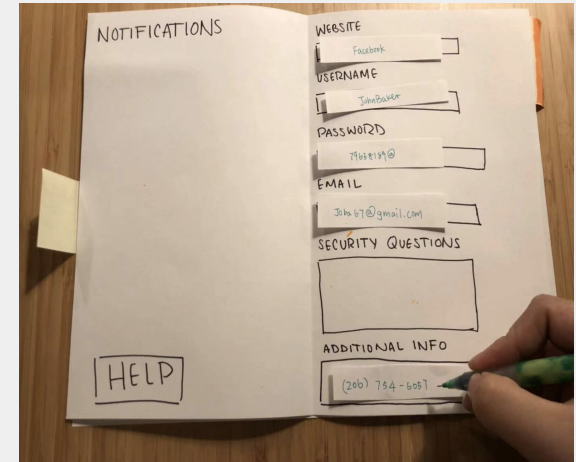
# Task 1: Storing, generating, and updating passwords



Use facial recognition  
to securely unlock

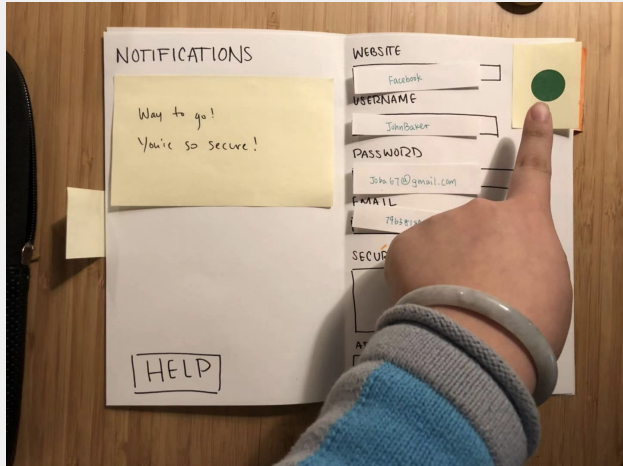


Use index page to locate  
next available page

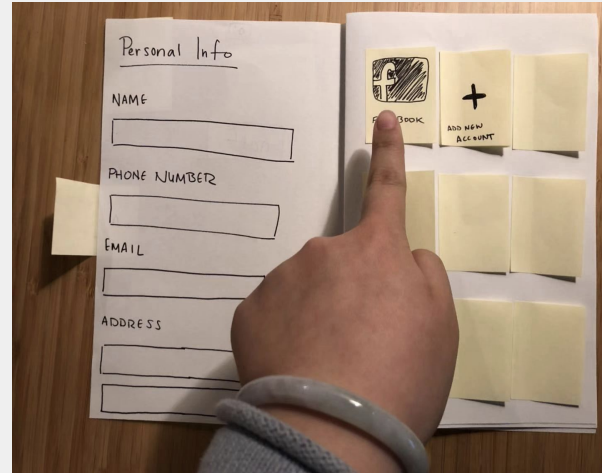


Use available page to  
record account information

# Task 1: Storing, generating, and updating passwords

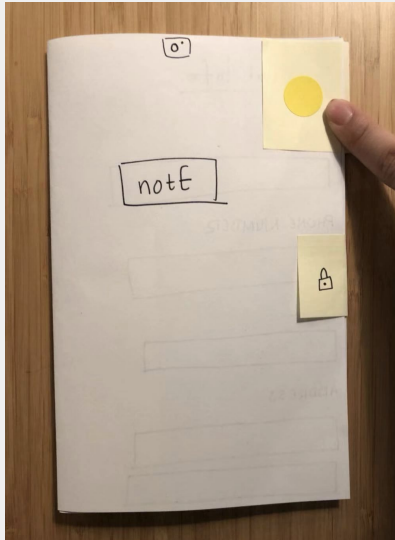


Confirmation of entry  
with a green light

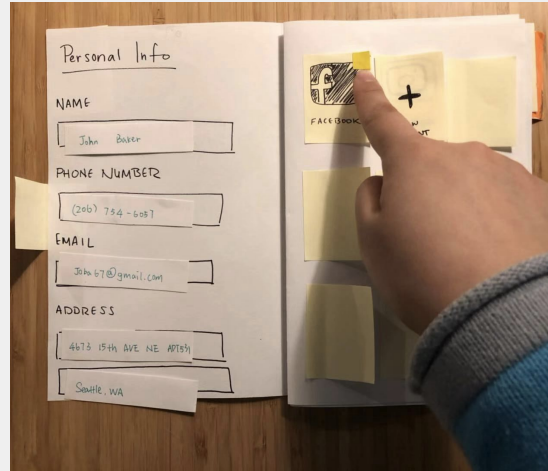


Index page automatically  
updates for quick search

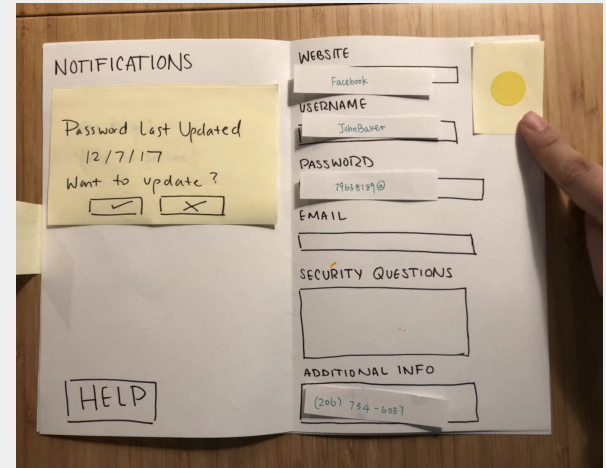
# Task 1: Storing, generating, and updating passwords



Yellow light indicates minor account issue



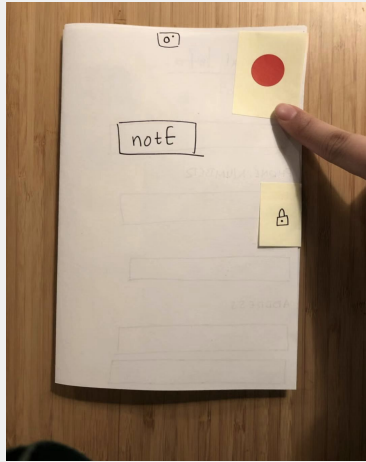
Yellow light shows on the index page



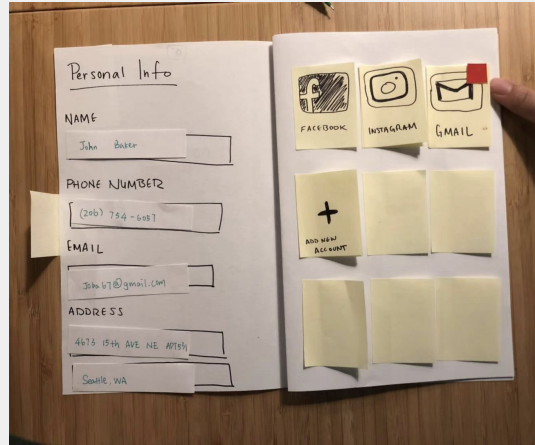
Prompt to update password



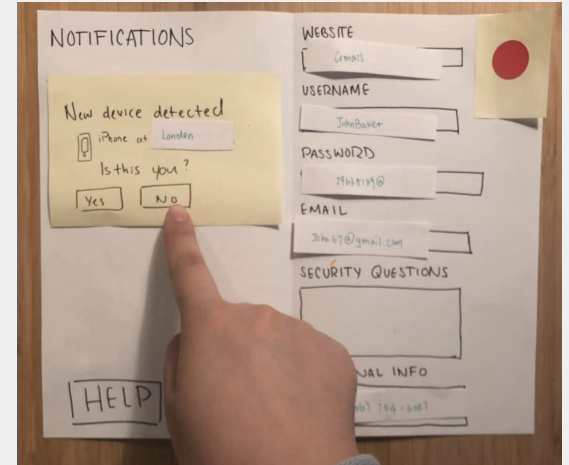
# Task 2: Giving Guidance After an Account Has Been Compromised



Red light indicates severe account issue

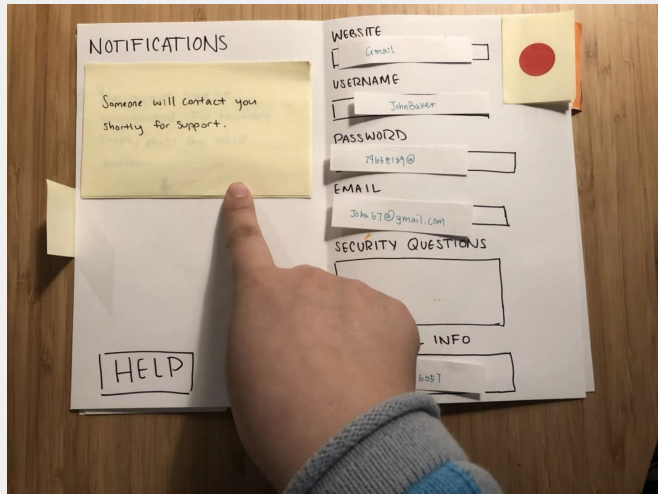


Red light shows on the index page

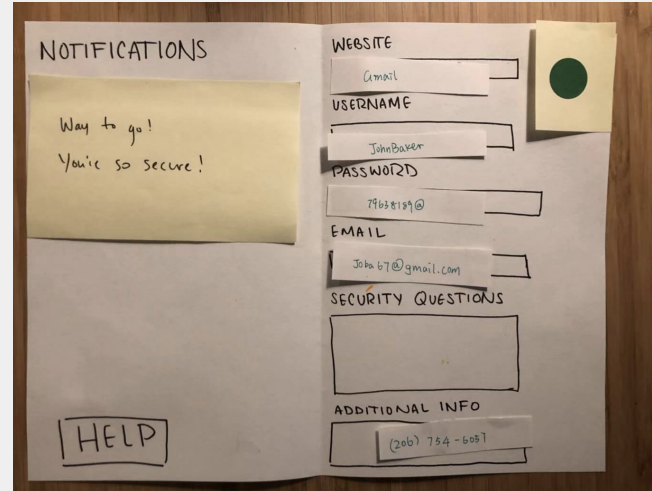


Red light shows on page and notification provides more information

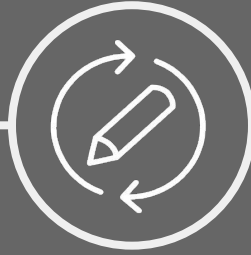
# Task 2: Giving Guidance After an Account Has Been Compromised



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



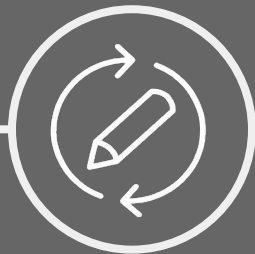
Greenlight shows on page indicating no further security issues.



# TESTING PROCESS

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2 heuristic evaluations + 3 usability tests



# HEURISTIC EVALUATION

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Identifying as many major usability issues as possible before conducting usability tests

# Testing Process: Heuristic Evaluation



## Participants

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

## Method

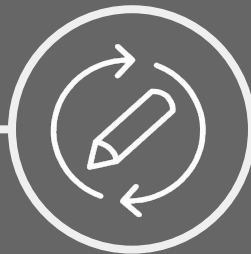
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- Brief introduction of our design
- Give them scenarios and observed
- Focused on violations of Nielsen's heuristics for interface design

## Issues

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- Lack of help + documentation



# USABILITY TESTING

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Testing the simplicity and intuitiveness of our design among our target audience

# Testing Process: Usability Testing



## Participants

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- Seniors found in the library
- Familiar with technology

## Method

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

## Issues

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- Initially gave insufficient explanation of design
- Over-corrected and gave too much

# Testing Results: Main Takeaways



## Heuristic Evaluation

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- Help and documentation
- Consistency

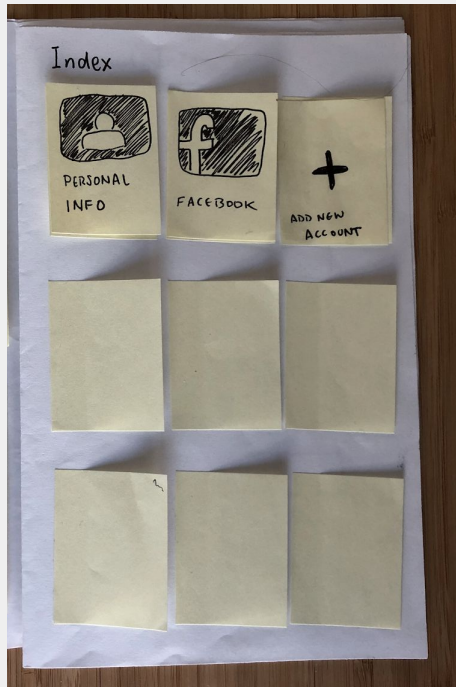
## Usability Testing

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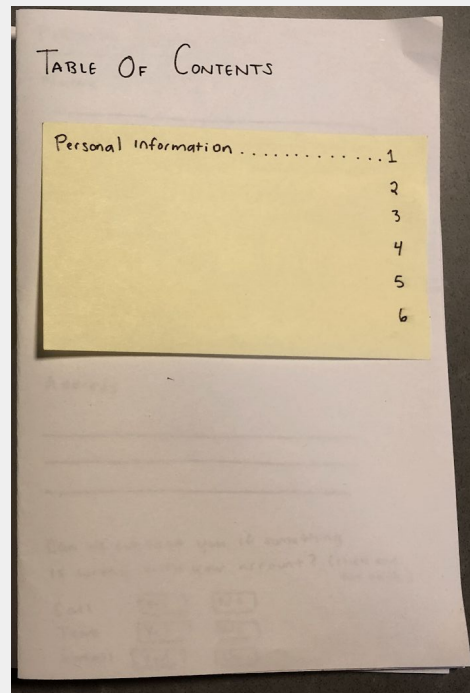
- Level of documentation and instruction
- Need more resemblance to a notebook
- Intuitiveness



# Major Changes: Change Index to traditional table of contents



Before



After

# Major Changes: Change input boxes to regular lines



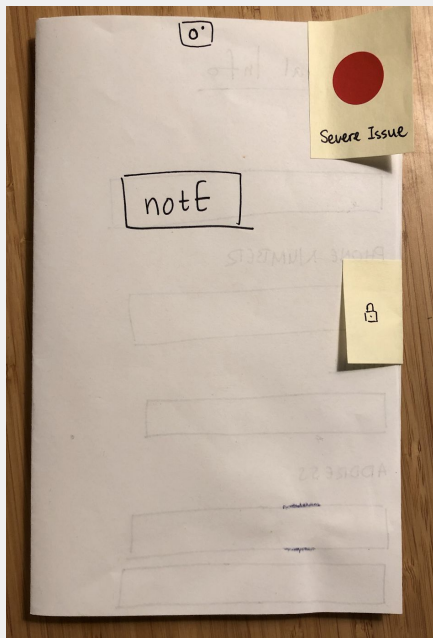
A hand-drawn form on a piece of paper with several rectangular input boxes. The labels are: WEBSITE \*, USERNAME, PASSWORD, EMAIL, SECURITY QUESTIONS, and ADDITIONAL NOTES. A finger is pointing to the bottom of the SECURITY QUESTIONS box.

Before

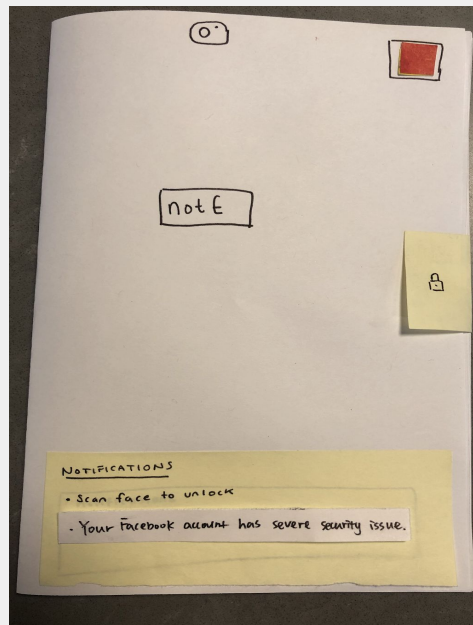
A hand-drawn form on a piece of paper with horizontal lines for input. The labels are: Website, Username, Password, Email, and Security Questions / Additional. A hand is writing 'JohnBaker' in the Username field and 'JoBA9702@' in the Password field. The Email field contains 'JohnBaker@gmail.com'. There is a small number '2' in the top right corner.

After

# Major Changes: Add screen on the front cover

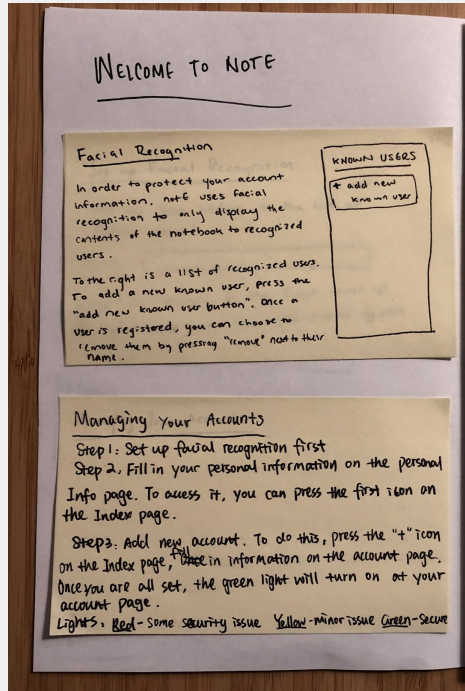


Before

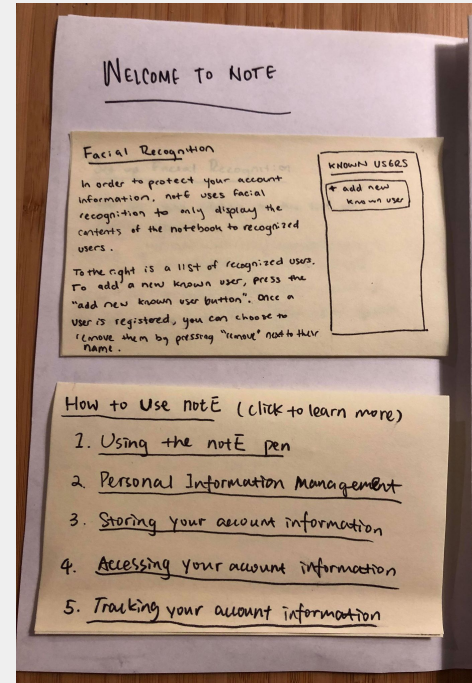


After

# Major Changes: Change help section to high level topics



Before



After

# Final Paper Prototype

Cover

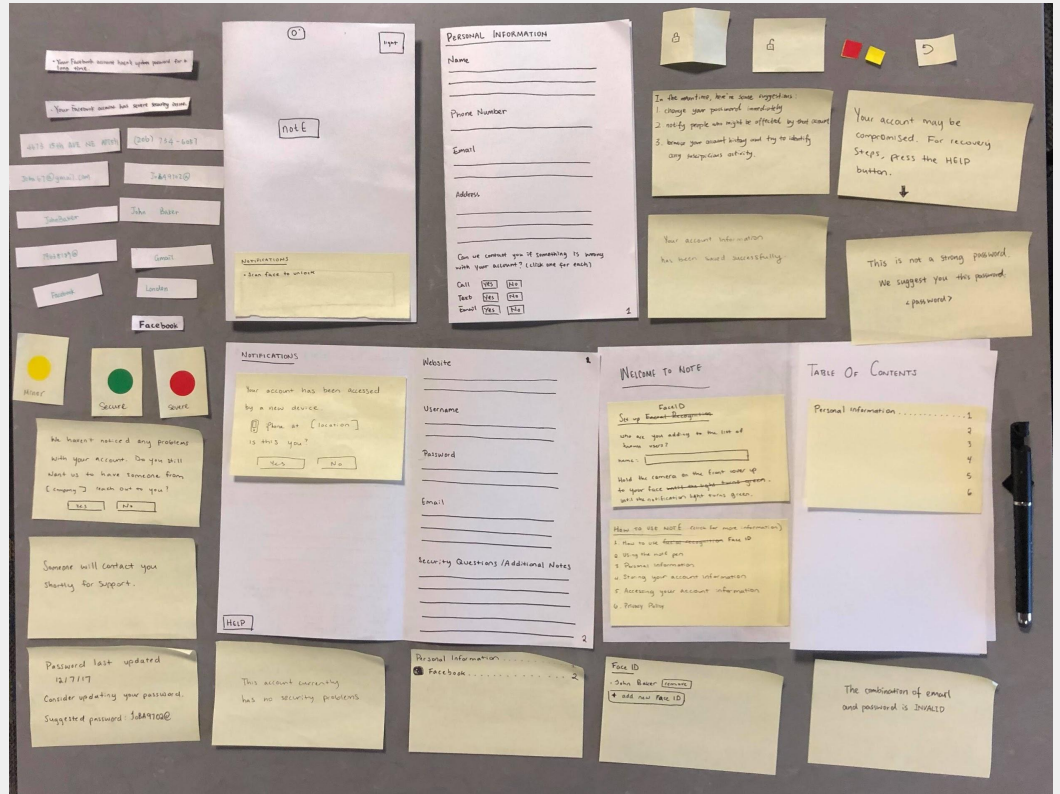
Index Page

Account Page

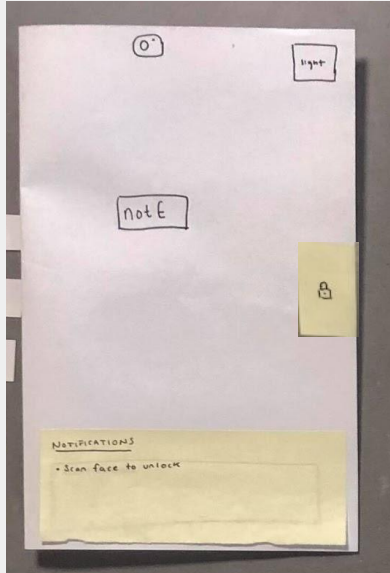
Notification Page

Light Notifications

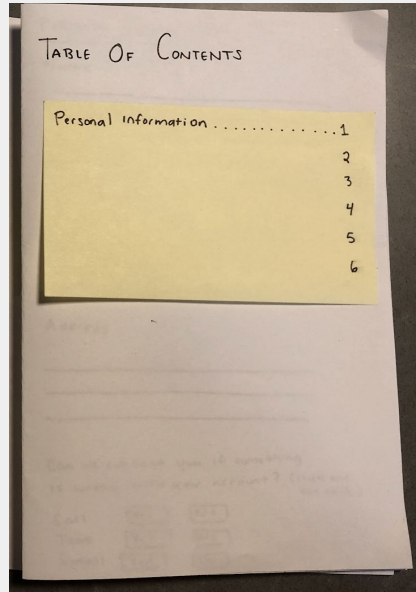
Linked Pen



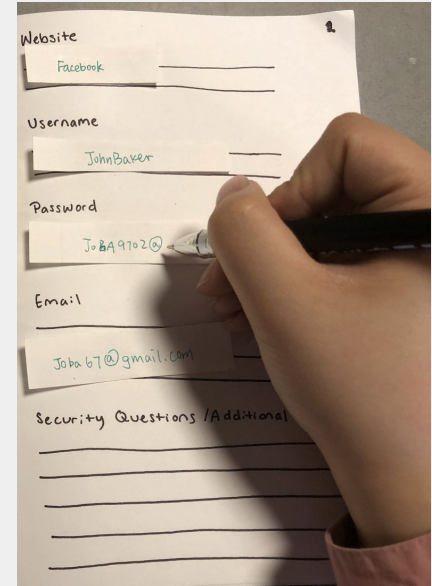
# Task 1: Storing, generating, and updating passwords



Use facial recognition to secure and unlock

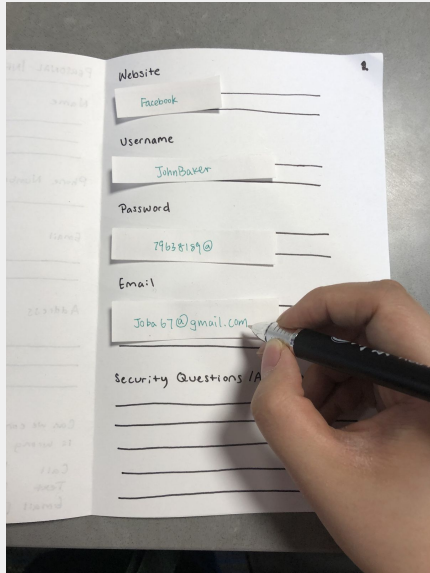


Use index page to locate next available page

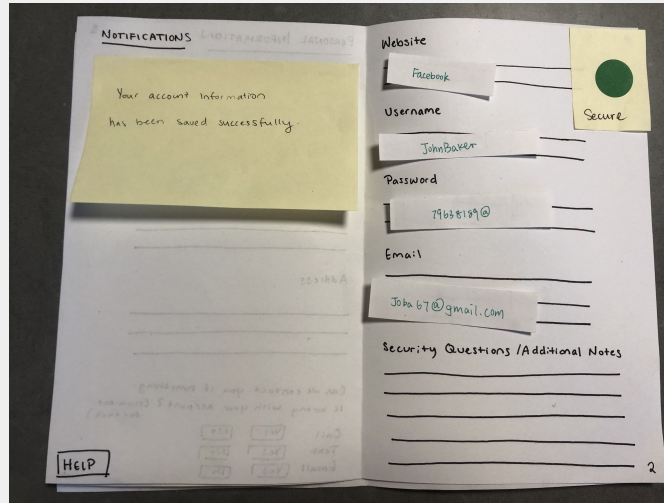


Use available page to record account information

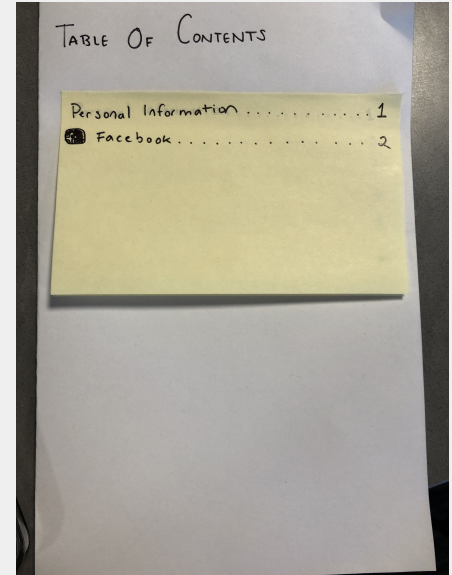
# Task 1: Storing, generating, and updating passwords



Offer password suggestions

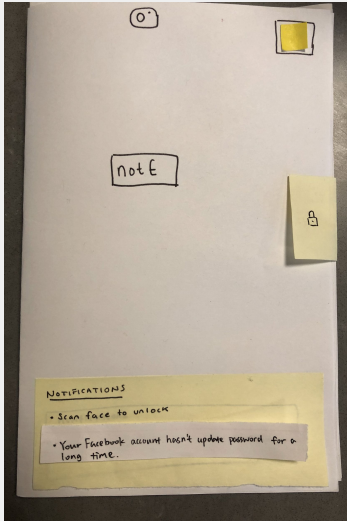


Confirmation of entry with a green light

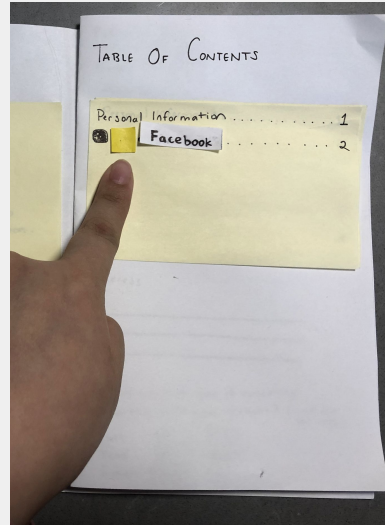


Index page automatically updates for quick search

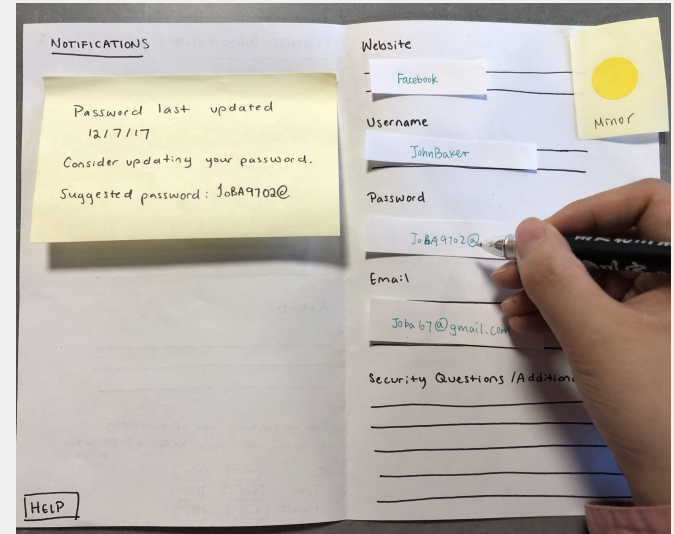
# Task 1: Storing, generating, and updating passwords



Yellow light indicates minor issue with an account



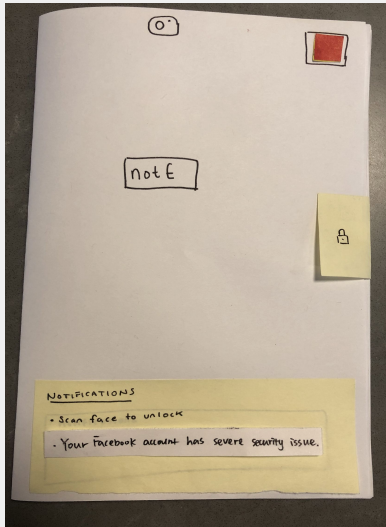
Yellow light shows affected account



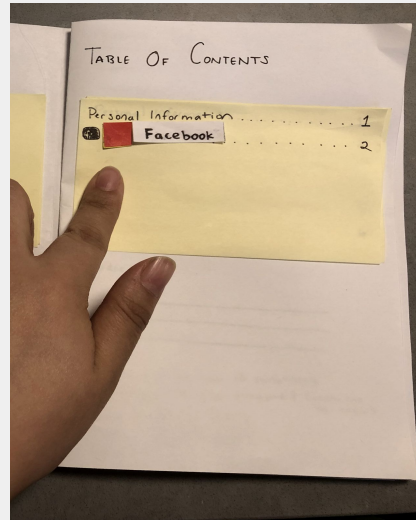
Offer suggested password for the update



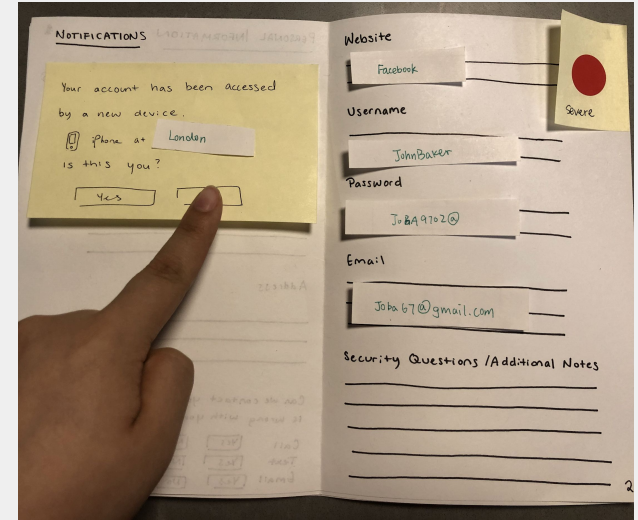
# Task 2: Giving Guidance After an Account Has Been Compromised



Red light indicates major account issues

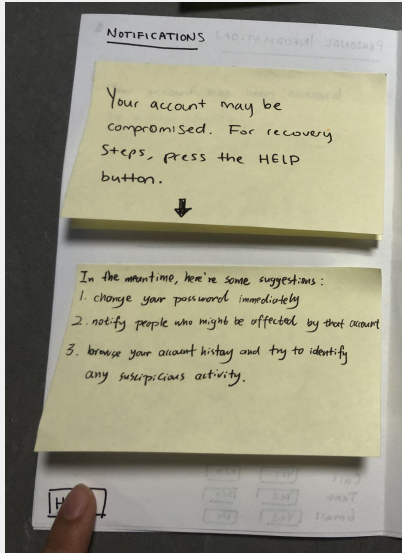


Red light shows on index page

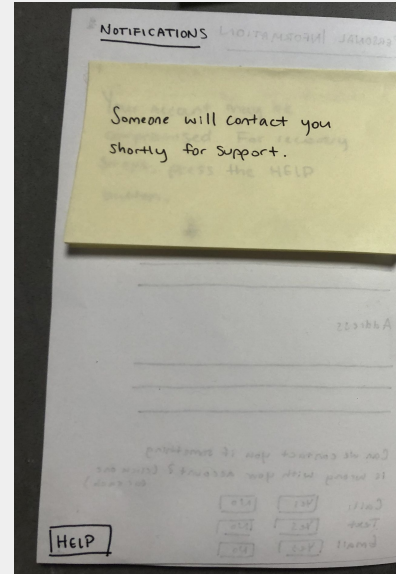


Red light shows on page. Notification provides more information

# Task 2: Giving Guidance After an Account Has Been Compromised

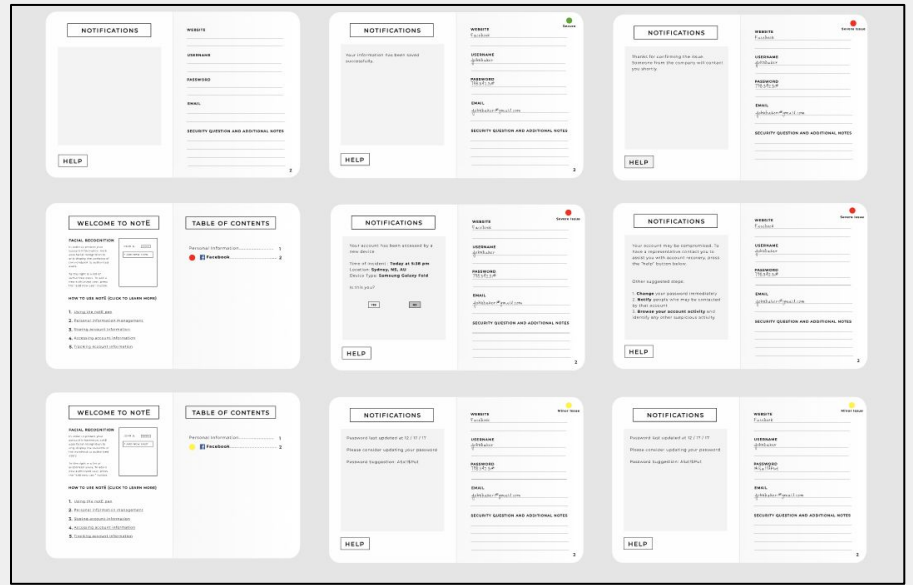


Red light shows on page. Notification provides more information

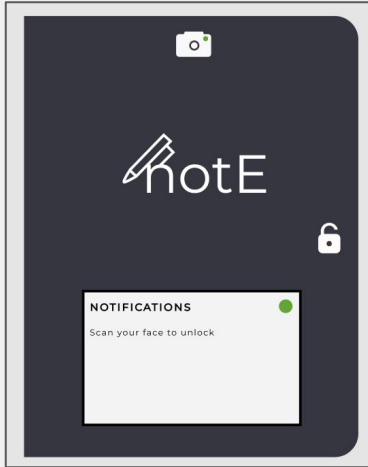


Notebook will contact help and suggests other steps

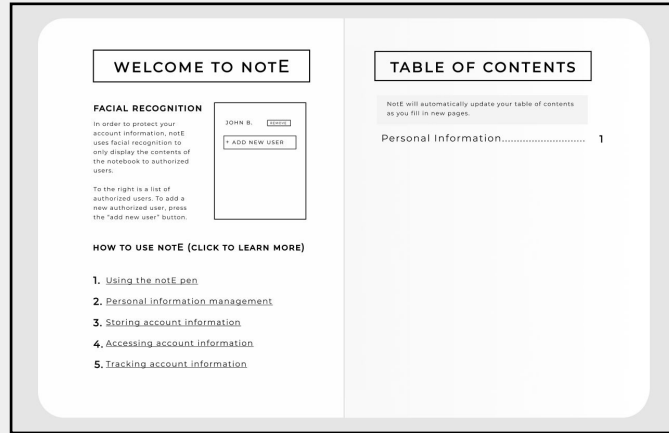
# Digital Mockup: Overview



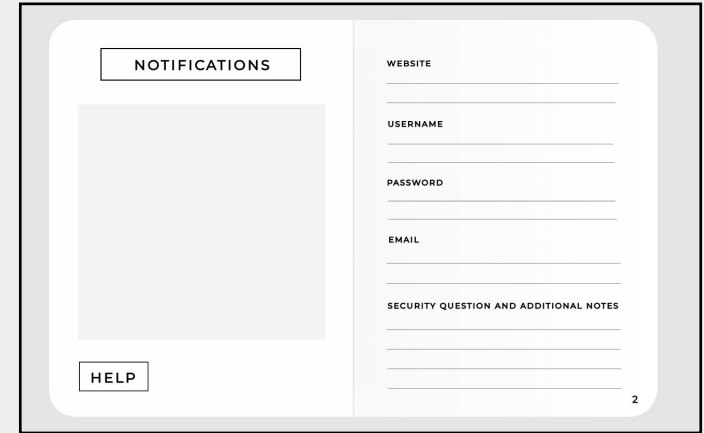
# Task 1: Storing, generating, and updating passwords



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@

**WEBSITE**  
Facebook

**USERNAME**  
johnbaker

**PASSWORD**

**EMAIL**

**SECURITY QUESTION AND ADDITIONAL NOTES**

**HELP**

2

Offer password suggestions

**NOTIFICATIONS**

This account currently has no security issues.

**WEBSITE**  
Facebook

**USERNAME**  
johnbaker

**PASSWORD**  
7983423@

**EMAIL**  
johnbaker@gmail.com

**SECURITY QUESTION AND ADDITIONAL NOTES**

**Secure**


**HELP**

2

Confirmation of entry with a green light

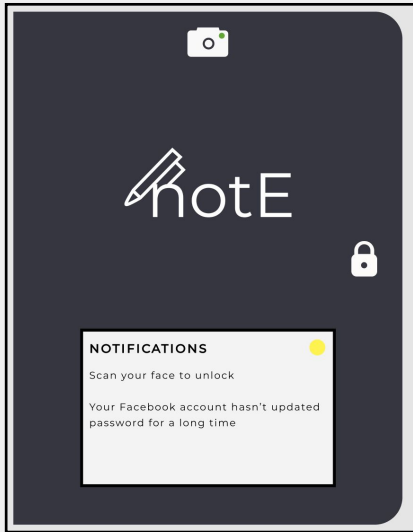
**TABLE OF CONTENTS**

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

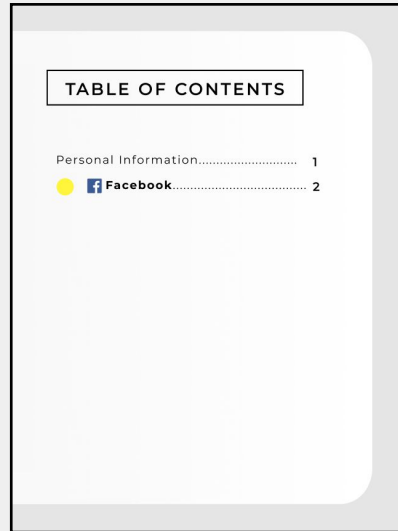
Personal Information.....	1
 Facebook.....	2

Index page automatically updates for quick search

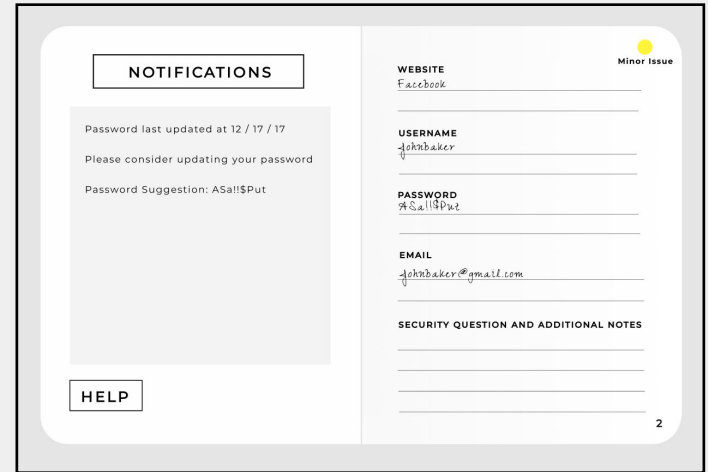
# Task 1: Storing, generating, and updating passwords



Remind to change password

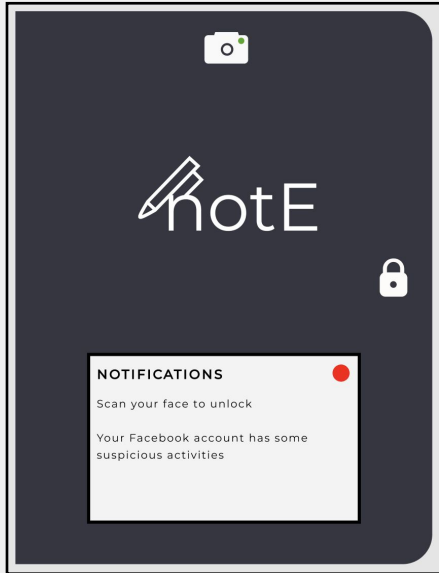


Yellow light shows on index page

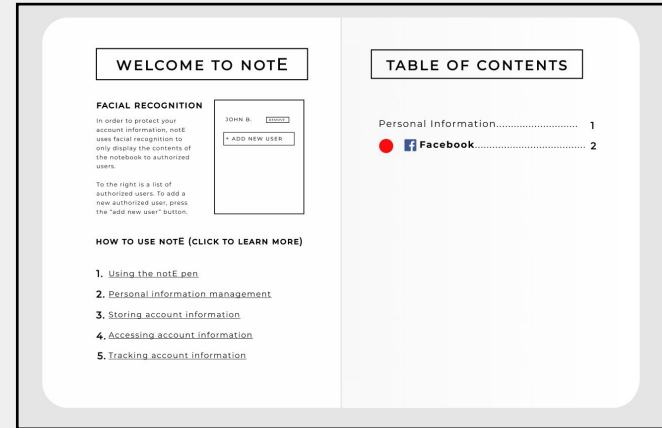


Offer suggested password for the update

# 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

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

Notebook will contact  
help and suggests  
other steps

### NOTIFICATIONS

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

Notebook will contact  
help and suggests  
other steps





## SUMMARY

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### 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