CovidCheck App and Tablet Design

Morris Chow

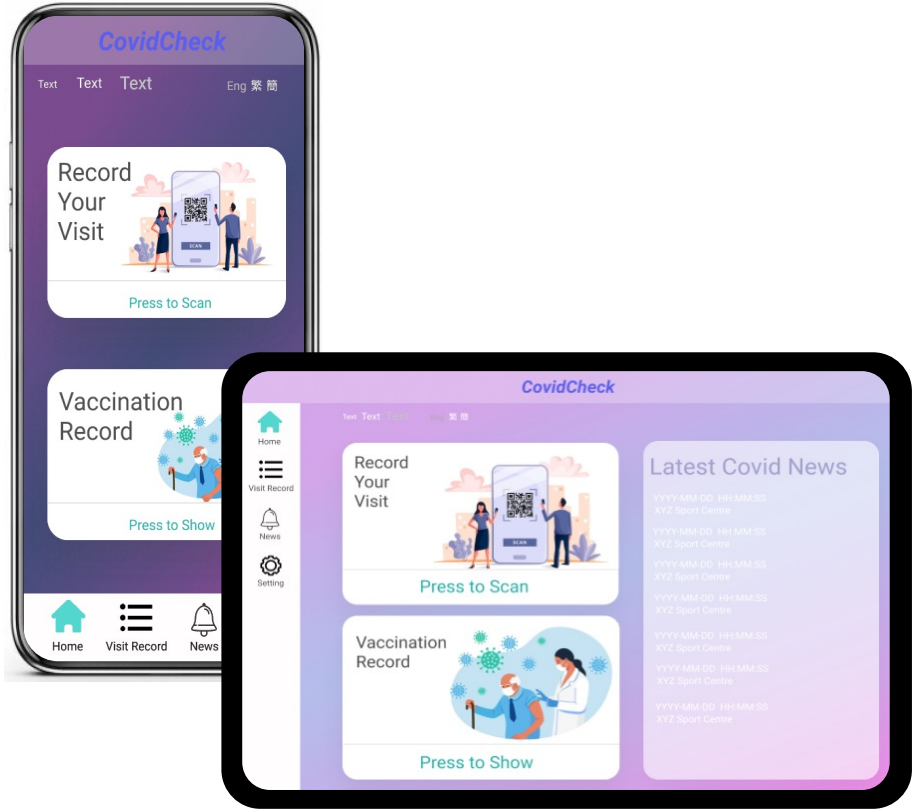
Project overview

The product:

CovidCheck is a covid checking and tracking app in Hong Kong. It strives to record locals' covid information and provides latest covid news to the users. CovidCheck targets Hong Kong residents like teenagers, university students, adults or even the elderly who require to get into different facilities or restaurants in Hong Kong.

Project duration:

Nov 2021 to Dec 2021.



Project overview

The problem:

Busy workers and university students lack the time to register their footprints. While the elderly does not familiar with complicated app controls.

The goal:

Design an app for CovidCheck that allows users to easily record their covid footprints and receive covid news.

Project overview

My role:

UX designer designing an app for CovidCheck from conception to delivery.

Responsibilities:

Conducting interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, and iterating on designs.

Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

User research: summary

I conducted interviews and created empathy maps to understand the users I'm designing for and their needs. A primary user group identified through research was working adults and elderly who lack the time to register their footprints and does not familiar with complicated app controls. Most interview participants reported feeling badly about currently traditional recording methods. The feedback received through research made it very clear that users would be open and willing to work towards digital and paper-free recording mechanism if they had access to an easy-to-use tool to help guide them.

User research: pain points

1

Time

Working adults are too busy to spend time on recording

2

Accessibility

Platforms for recording covid footprints are not equipped with assistive technologies

3

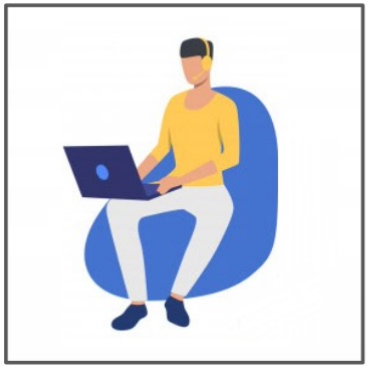
IA

Current paper recording ways are often difficult to read and fill in the footprint form. It also hard to have a clear repository to consolidate one’s footprints’ record

Persona: **Henry**

Problem statement:

Henry is a busy university student who needs easy and systematic access to record and receive covid footprints information because he has no time to consolidate the aforementioned data for himself.



Ben

Age: 24
Education: Bachelor Degree in Computing
Hometown: Hong Kong
Family: Single, lives in campus hall
Occupation: Full Time University Student

"I have a busy university life and hope to order record the covid footprint within a short time"

Goals

- To record covid footprint easily and quickly
- To display his vaccination record anytime anywhere
- To receive coivd news as latest as possible

Frustrations

- "Currently there is no a systematic way to keep track my covid footprint as well as vaccination record"
- "Currently covid news or message are not transparent enough"

Henry is a busy university student. Apart from attending regular lectures and lab tutorials, he is also a member of different committees. Hence, he required to enter different facilities within a day while currently covid footprint recording methods are mainly paper-way . Henry would like for there to be the easiest and fastest way to record and archive his covid footprint as well as vaccination record.

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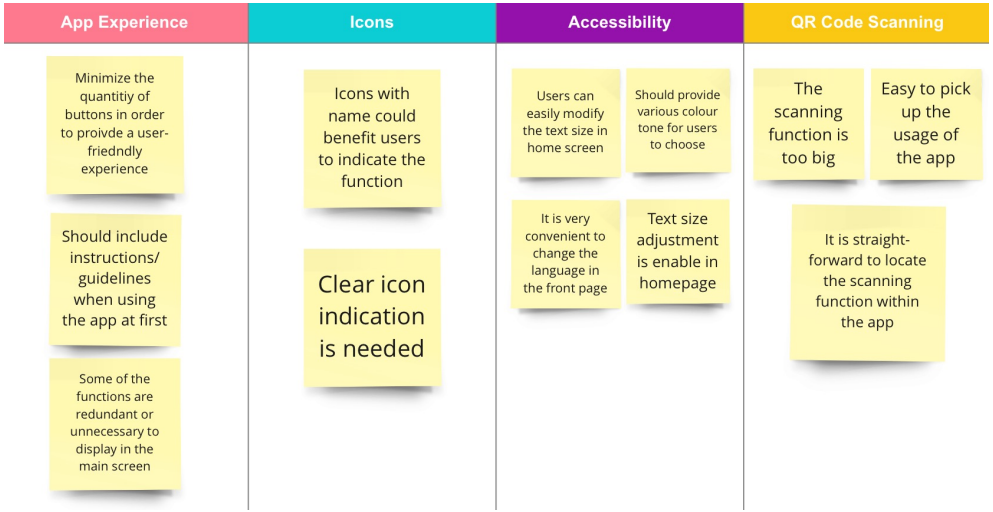
Affinity Diagram & Prioritized Insights

Affinity Diagram



Prioritized Insights

Priority 0

1. Based on the theme that: Users utilize the QR code scanning function the majority of time, an insight is: prioritise the scan code by modifying the layout and structure between visual and descriptive information.

2. Based on the theme that: A majority of the users consist of accessibility issues, an insight is: more accessibility functions such as colour and language options should be provided in the app.

Priority 1

1. Based on the theme that: Users are distracted by unnecessary app functions, an insight is: reduced the options by filtering functions and removing redundant functions.

Priority 2

1. Based on the theme that: Users would like to have a better and clear guidance when using the app for the first time, an insight is: adding different pop-up animated instructions for guiding the users to use the app at first.

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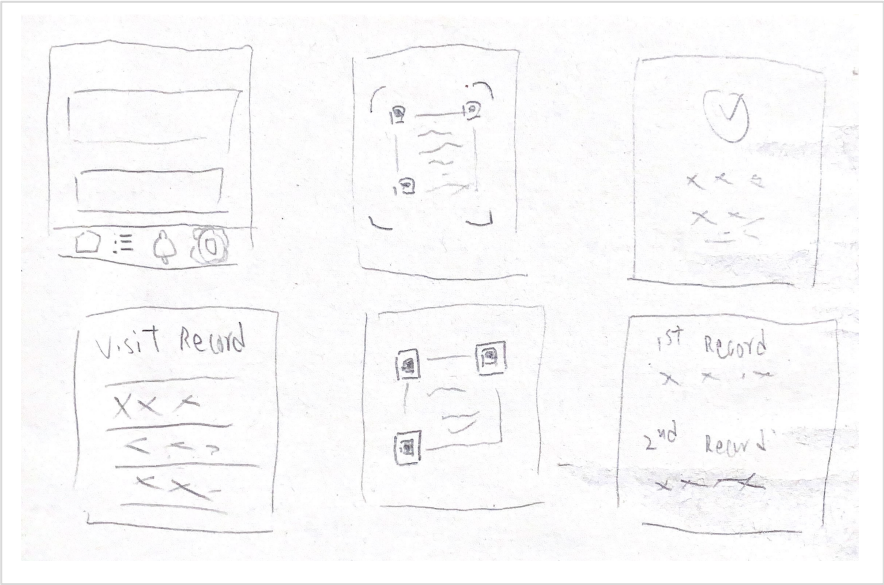
Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies

Paper wireframes

Taking the time to draft iterations of each screen of the app on paper ensured that the elements that made it to digital wireframes would be well-suited to address user pain points. For the home screen, I prioritized a **QR Code Scanning** to help users saving time.



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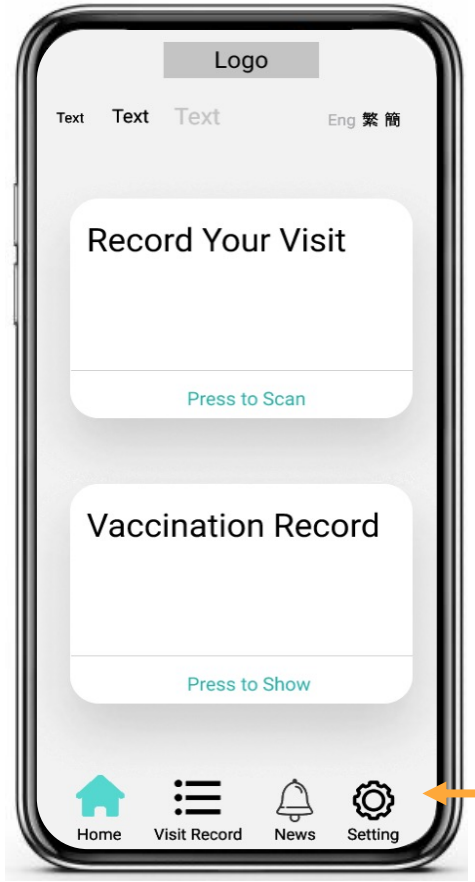
Digital wireframes

After ideating and drafting some paper wireframes, I created the initial designs for the CovidCheck app. These designs focused on delivering personalized guidance to users to help manage their covid footprints.

Large Visit Record and Vaccination Record button for easy and quick access for both major functions of the app



Easy access to app features from global navigation

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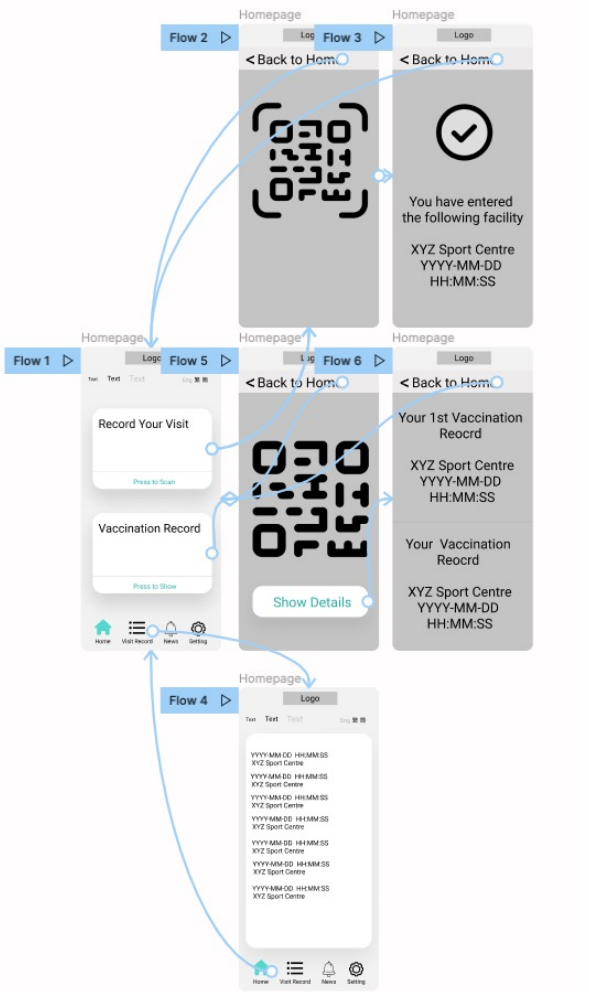
Low-fidelity prototype

Using the completed set of digital wireframes, I created a low-fidelity prototype. The primary user flow I connected was recording users' covid footprints, retrieving users' vaccination record and latest covid news , so the prototype could be used in a usability study.

View [CovidCheck low-fidelity prototype]



Usability study: findings

I conducted two rounds of usability studies. Findings from the first study helped guide the designs from wireframes to mockups. The second study used a high-fidelity prototype and revealed what aspects of the mockups needed refining.

Round 1 findings

1. Users want to record their covid footprint quickly
2. Users want a vaccination record section

Round 2 findings

1. Users want adjustable text size function
2. Users want a covid news section

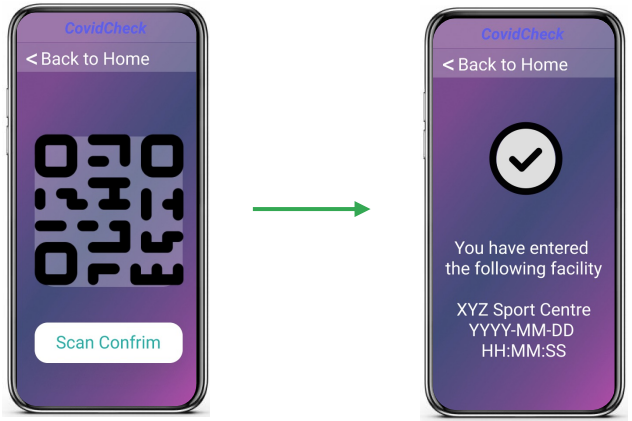
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

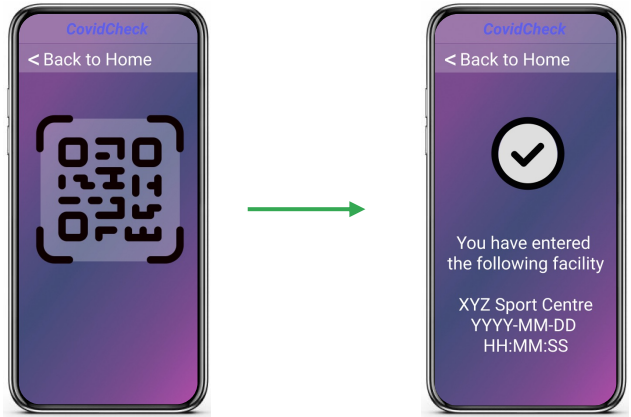
Mockups

The usability study revealed frustration with the scanning flow. Some users would like the app automatically process to scanned successful page instead of the need to press the scan confirm button. Hence, I changed **the transition interaction to after delay in 800ms**.

Before usability study



After usability study



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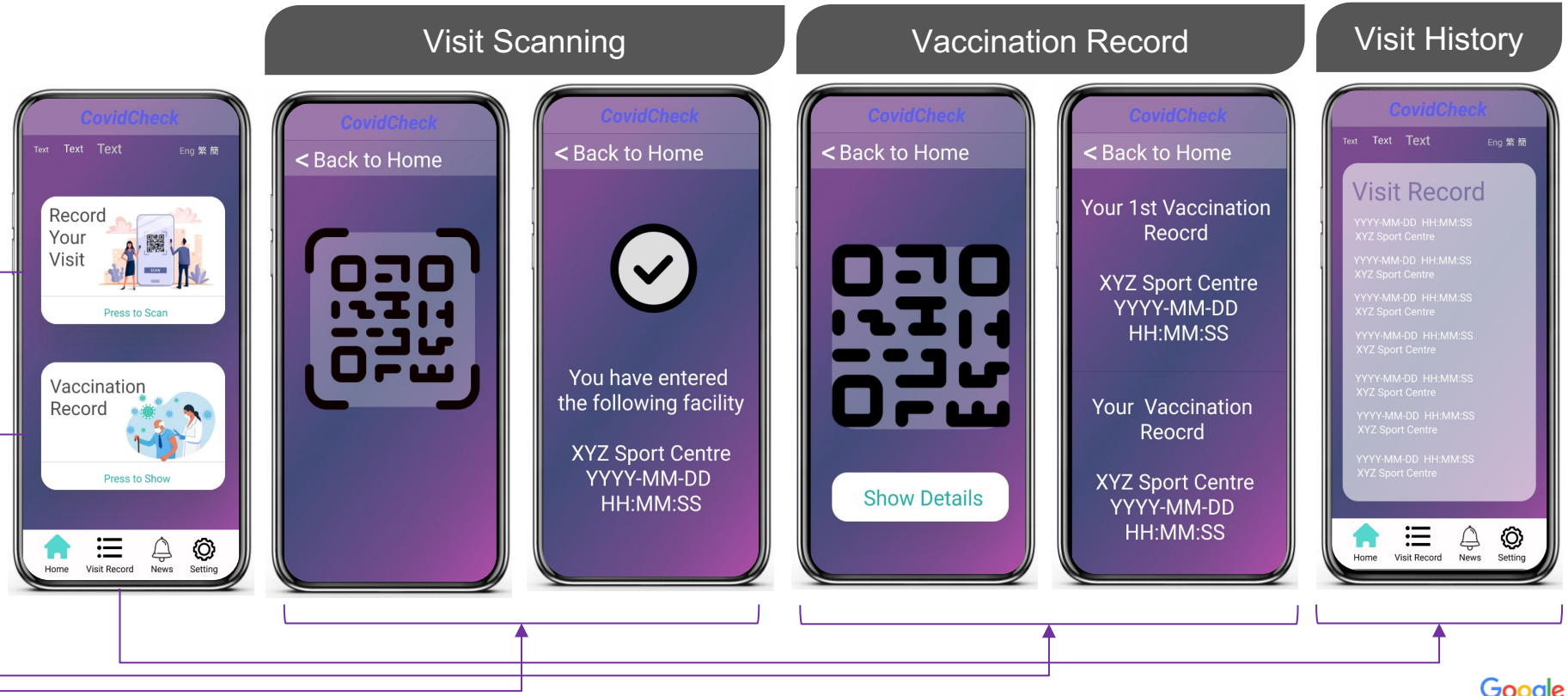
Key mockups



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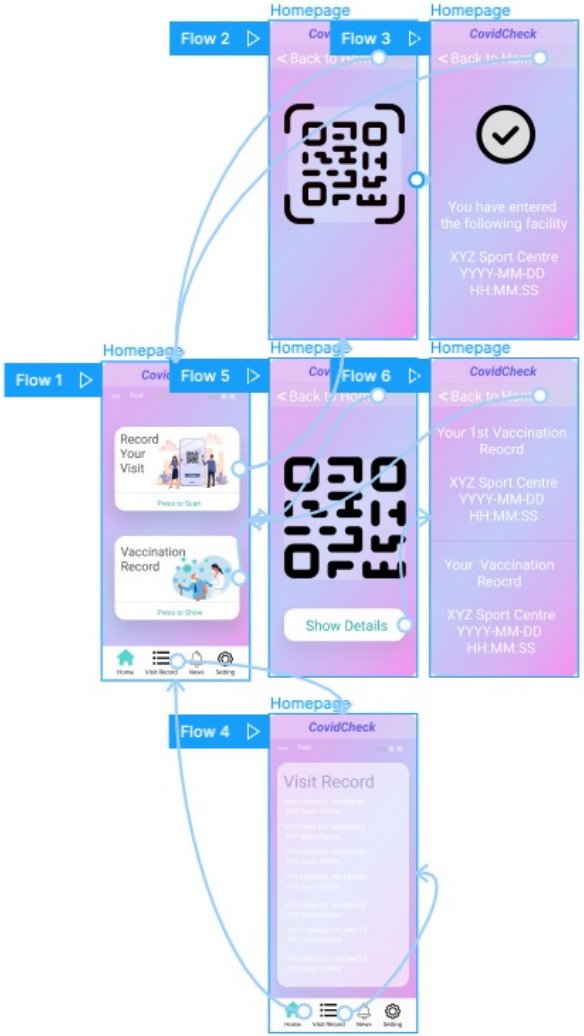
High-fidelity prototype

The final high-fidelity prototype presented cleaner user flows for scanning, displaying the covid footprint as well as user's vaccination records. It also provides the latest covid news for users.



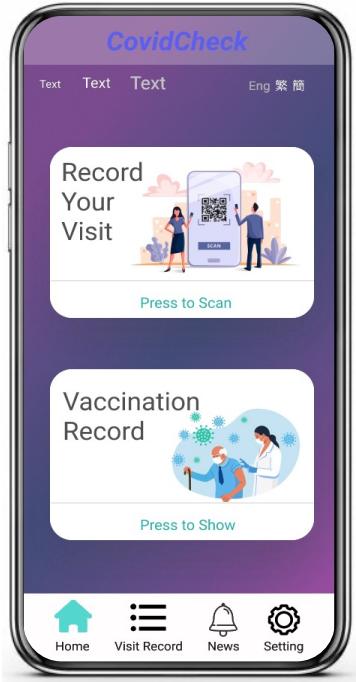
Responsive Design

- Information architecture
- Responsive design

Responsive designs

The designs for screen size variation included mobile, tablet. I optimized the designs to fit specific user needs of each device and screen size. Since the CovidCheck is a mobile application, there will be no

Mobile Phone App



Tablet

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Accessibility considerations

1

Provided access to users who are vision impaired through adding alt text to images for screen readers.

2

Used icons to help make navigation easier.

3

Used detailed imagery for scan QR Code and display vaccination record to help all users better understand the designs.

Going forward

- Takeaways
- Next steps

Takeaways

Impact:

The app makes users feel like CovidCheck really thinks about how to meet their needs.

One quote from peer feedback:

“The app made it so easy and instant to record my footprints! I would definitely use this app as a go-to for a covid-footprints record for myself and for the community.”

What I learned:

While designing the CovidCheck app, I learned that the first ideas for the app are only the beginning of the process. Usability studies and peer feedback influenced each iteration of the app’s designs.

Next steps

1

Conduct another round of usability studies to validate whether the pain points users experienced have been effectively addressed.

2

Conduct more user research to determine any new areas of need.

Let’s connect!

Thank you for your time reviewing my work on the CovidCheck app! If you’d like to see more or get in touch, my contact information is provided below.

Email: morrischow9@email.com
Website: https://github.com/morriscsy/Work-Samples

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