

Timecard App Design

Ken Ressler

Project overview



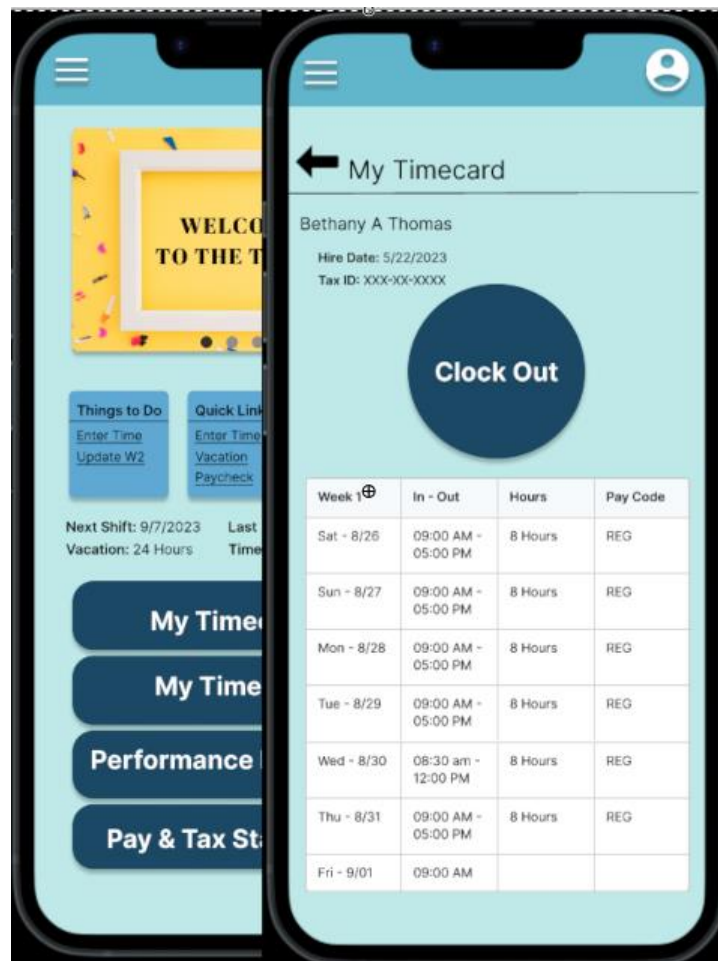
The product:

The Timecard App is a fully featured timecard system that allows users to manage their time and allows management to approve timecards and work with common payroll software. The app's goal is to help make entering time as a easy as possible.



Project duration:

August 2023 to October 2023.



Project overview



The problem:

Often workers are in a rush and forget to clock in or out of the timecard system.



The goal:

Make it easier for workers to clock in and out through reminders, Geofencing, and ease of use.

Project overview



My role:

UX designer designing Timecard App from conception to delivery.



Responsibilities:

Conduct interviews, wireframing, low and high-fidelity prototyping, run usability studies, encourage accessible design, and iterate on each design after feedback.

Understanding the user

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

User research: summary



I created empathy maps to understand the user I'm designing for and their needs. Two primary groups identified through research were employees of restaurants and restaurant management.

The restaurant employees confirmed initial assumptions about timecard management, but also revealed the need for additional functionality, such as vacation time management, reminders to clockout, and scheduling. Restaurant management wanted quick timecard approvals, integration with payroll systems, and reminding employees to clock in and out.

User research: pain points

1

Clocking in and out

Takes up time during a staff person's shift and does not have reminders to clock in or out.

2

Paper Documents

Lots documents are thrown away or have to be stored. A great alternative would be electric documents that do not consume as much resources.

3

Approving Multiple Timecards

Approving each time entry and on each employees timecard can become cumbersome. It would be nice to able to handle them in bulk or on one screen.

4

Employees Forgot to Clock Out

When employees forget to clock out the manager has to override their timecard or it could delay payroll for the following week.

Persona: **Bethany Thomas**

Problem statement:

Bethany Thomas is a restaurant employee that is busy and focused who needs an automated solution for entering shift start and end information because she sometimes forgets to start/end times and it holds up timecard approval and payroll.



Bethany Thomas

Age: 30

Education: Culinary school

Hometown: San Jose, California

Family: Single, lives alone

Occupation: Cook

"Traveling lets me become a better chef!"

Goals

- Enter timecard using a computer or phone
- Clocking in and out can be done using one button
- Easily find vacation balance.

Frustrations

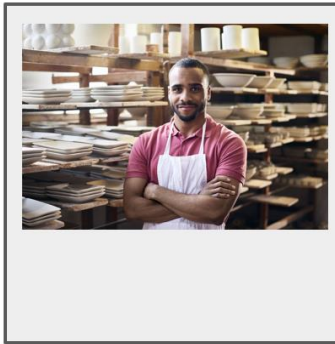
- Entering timecard information requires me to come in early and stay late.
- I don't like getting paper documents. I want everything electronic.

Bethany graduated culinary school with the goal of becoming of great chef. She does not want timekeeping to take away the time she spends making great meals. She also wants to protect the enviroment by elimanting wasted documents. She also likes to travel so knowing how much vacation she has to book her next trip is important.

Persona: Carlos Butler

Problem statement:

Carlos Butler is a restaurant owner in NYC. who needs a timecard systems to automate tracking employee time because of the demands of running a restaurant.



Name

Age: Carlos Butler

Education: University Graduate

Hometown: New York City

Family: 2 sisters

Occupation: Small Restaurant Owner

"My restaurant is part of my legacy."

Goals

- Pay employees on time.
- Make sure timecards are accurate.
- Handle changes in shifts.

Frustrations

- Timecards take up a lot of time managing.
- Employees forget to punch in and out.
- Timecards should connect to my billing system.

Carlos Butler's dream was to open a restaurant in New York City. We wants to be part of the community and provide jobs for people in his neighborhood. However, he does not want to get tied up with administering timesheets. He wants to use his time to share his passion with his customers.

User journey map

Bethany's goal is to enter the time for her shift. Often, everything works great. However, when things are crazy at work, clocking in and out suffers. She would rather focus on her next menu item then worrying about timecards.

Persona: Bethany Thomas

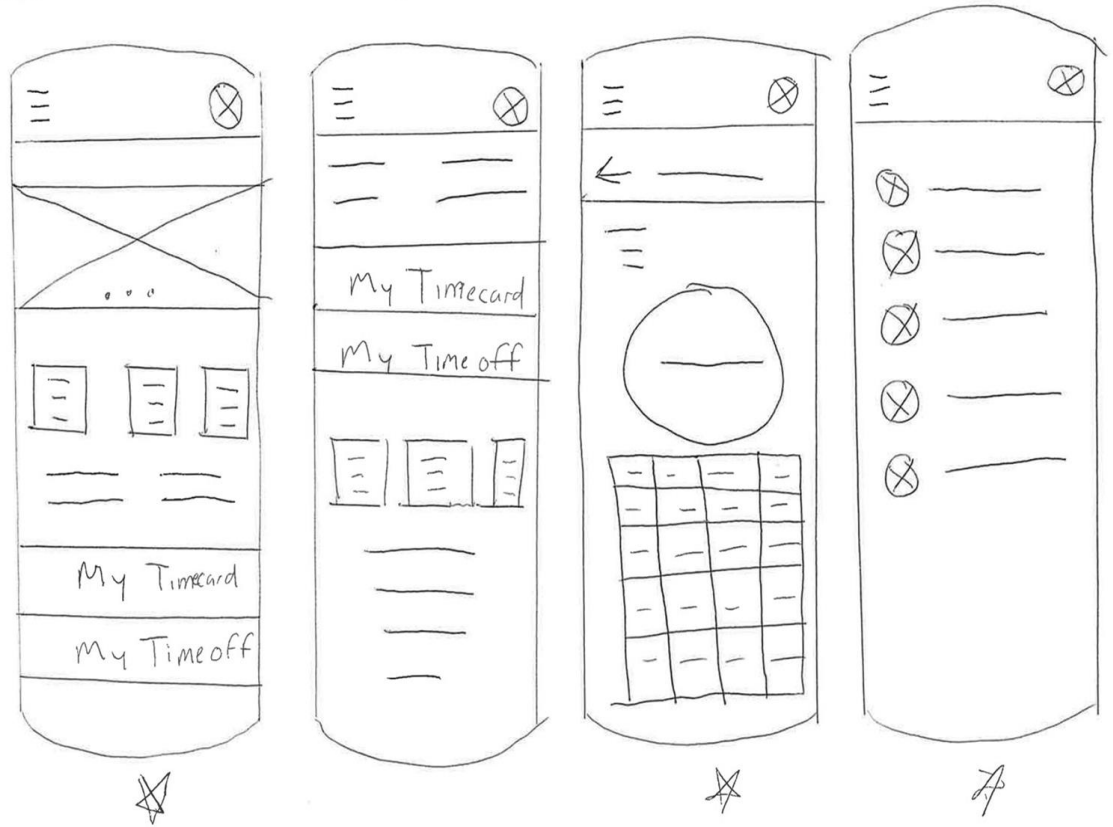
Goal: Record time for her shift on her timecard.

ACTION	Arrives at Work	Clocks In	Eats Lunch	Forgets to Clock Out	Clocks Out with Manager
TASK LIST	Tasks A. Arrives at work early. B. Cannot clock in until shift starts in 20 minutes. C. Starts looking at the menu for the day.	Tasks A. Has to leave her work area to clock in. B. Manager asks her a question. C. Ends up clocking in late.	Tasks A. Clocks out. B. Gets her lunch. C. Eats her lunch and talks to friend. D. Clocks back in.	Tasks A. Her shift ends. B. Leaves work talking to friend. C. Walks pass timeclock.	Tasks A. She calls manager. B. Manager logs into system. C. Manager clocks her out. D. Manager approves timecard.
FEELING ADJECTIVE	Frustrated Hopeful	Frustrated Hurried	Rushed Happy	Disappointed Forgetful	Embarrassment Relief
IMPROVEMENT OPPORTUNITIES	Add clock out reminders that are both audible and visual.	Create an app that allows user to clock in at their station. Take advantage of phone voice recognition.	Phone can clock her in and out based on her location in the building or if she is in or out of the building.	Add clock out reminders that are both audible and visual.	Ability to clock out from remote location through an app. Notify manager of remote clock out. Use screen reading technology on phone.

Element List: navigation, buttons, images, menus, tables

Paper wireframes

It was important to start my designs on paper were I could quickly modify the design without expending a lot of capital. I decided that the clock in/out button should be large and take a lot of focus.

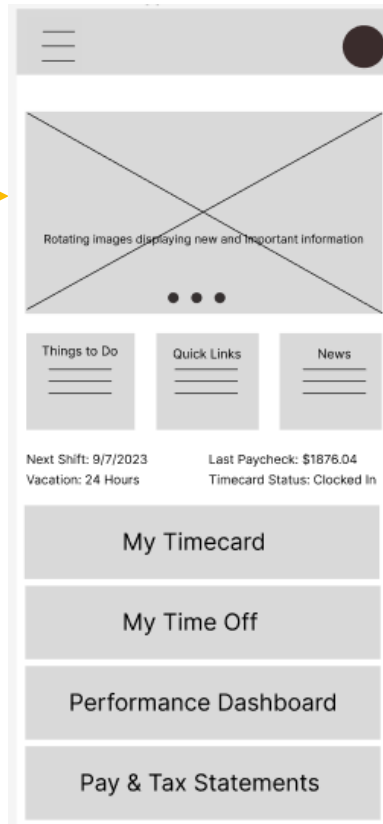


Stars indicate designs that will be used in the digital wireframes.

Digital wireframes

Throughout the design phase, I took input from user research and feedback to iterate on the initial screen designs.

An image carousel that will show new information to the user.



Buttons provide quick access to important parts of the application.



Digital wireframes

Easy clock in and out was very important, so this page's focus is on the clock in/out button so it is easy to find. Another priority is making sure the app works well with assistive technologies.

Large clock out button to make it easy to find.



← My Timecard

Bethany A Thomas

Hire Date: 5/22/2023

Tax ID: XXX-XX-XXXX

Clock Out

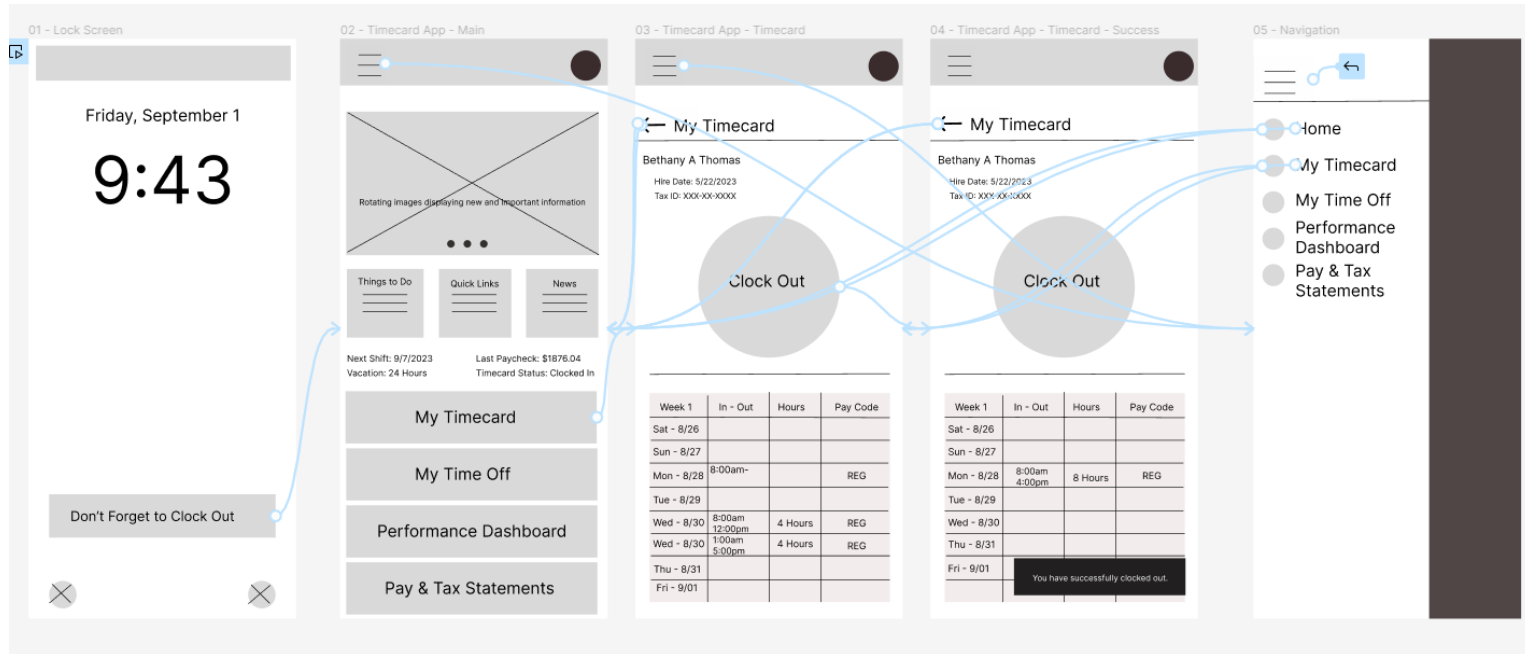
Week 1	In - Out	Hours	Pay Code
Sat - 8/26			
Sun - 8/27			
Mon - 8/28	8:00am-		REG
Tue - 8/29			
Wed - 8/30	8:00am 12:00pm	4 Hours	REG
Wed - 8/30	1:00am 5:00pm	4 Hours	REG
Thu - 8/31			
Fri - 9/01			

Table to organize user time.



Low-fidelity prototype

The low-fidelity prototype shows primary flow of a user being reminded to clock out and then following the reminder to the clock out screen. [Low-fidelity prototype](#)



Usability study: findings

I completed two usability studies. The first study helped the wireframes transition to mockups. The second study helped guide and enhance the high-fidelity prototypes.

Round 1 findings

- 1 Users wanted to quickly clock out of the system.
- 2 Users were worried that they would forget to clock in and out.
- 3 Wanted to see all of the work time located in one place.

Round 2 findings

- 1 Some of the fonts were too small.
- 2 The application needs bigger margins.

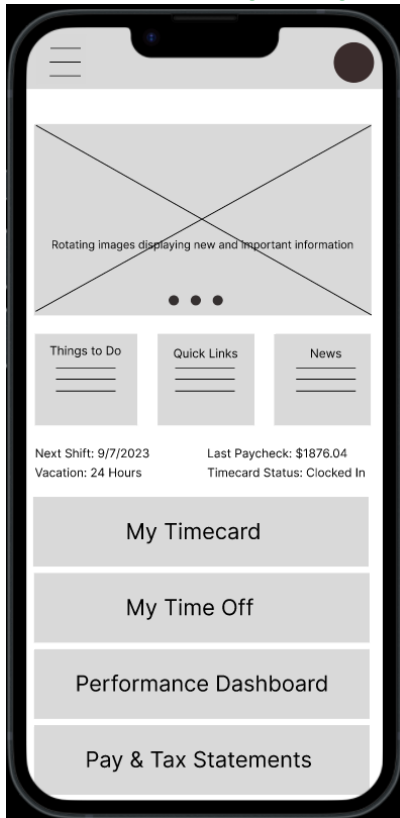
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

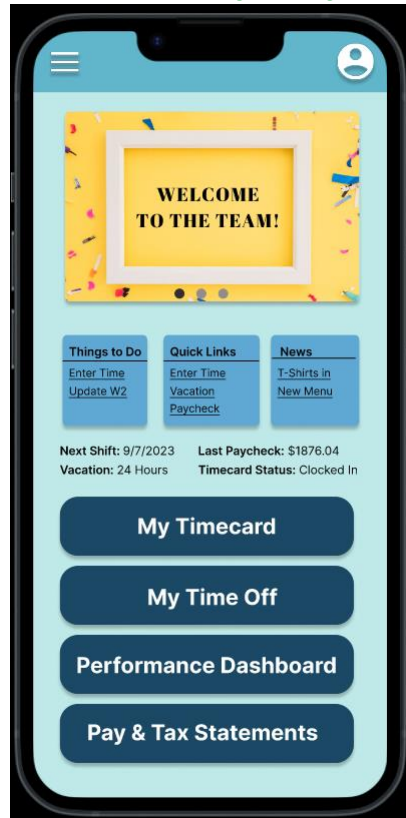
Mockups

After the first usability study, I improved the information available to the user and how they could access it.

Before usability study



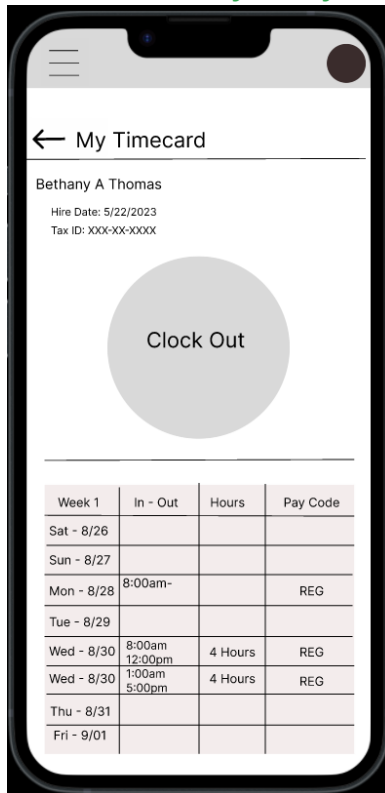
After usability study



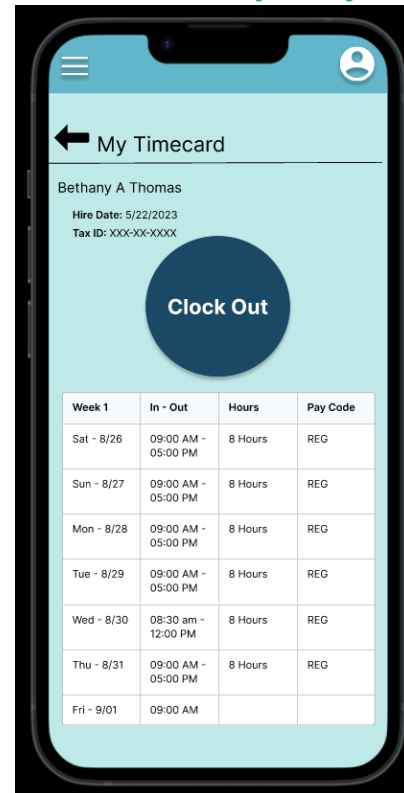
Mockups

After the second usability study I made sure the fonts were clearer and larger and spacing was improved to make it more readable.

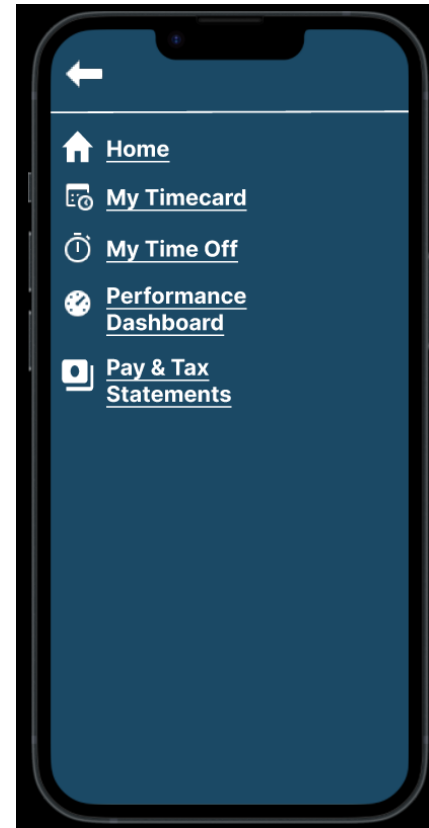
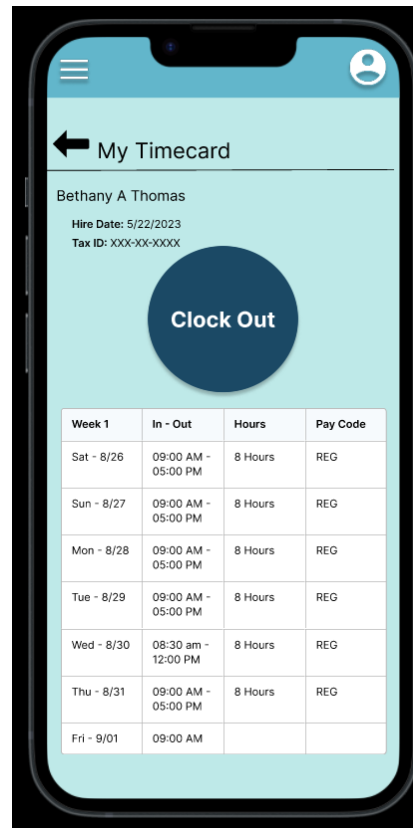
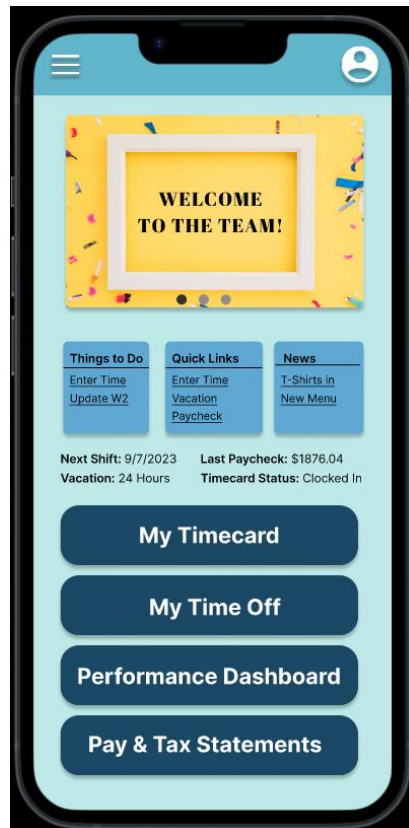
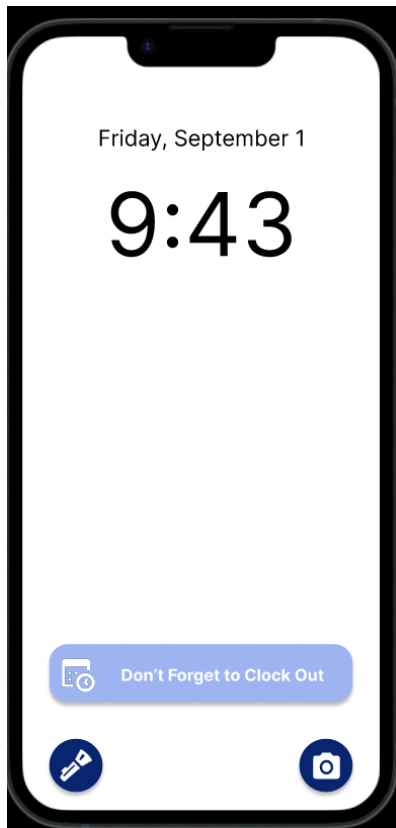
Before usability study



After usability study

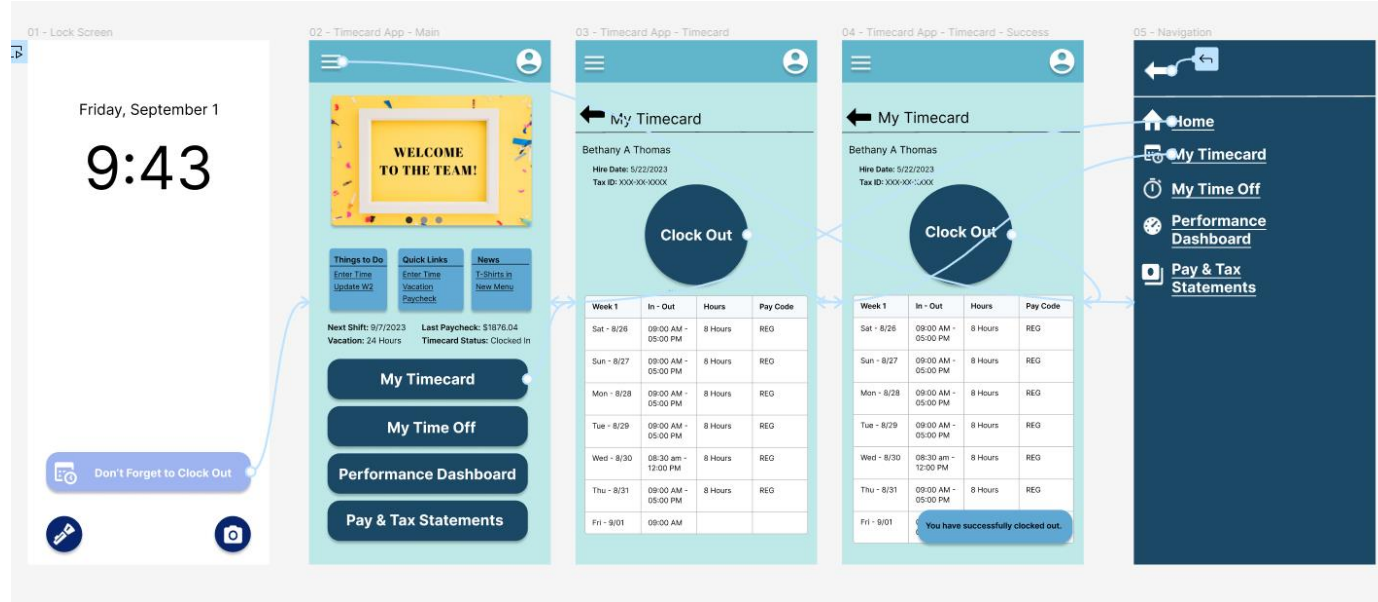


Mockups



High-fidelity prototype

The final high-fidelity prototype showed easier navigation and better spacing and grouping of elements.



Accessibility considerations

1

Alternate text for photos is an important way to support users with low vision by enabling the app to work with screen readers.

2

I plan on supporting multiple languages to help users better navigate the application when English is not their primary language.

3

I plan on incorporating default phone OS features such as light vs dark mode to make text easier to read.

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

The app will allow users to confidently leave work know they clocked out for the day.

One quote from the usability study: “I always feel like I forget to clock out and have to go back and double check.”



What I learned:

I learned how important user feedback is to the design process. Users were able to identify features and pain points that I could never have predicted on my own. With each update, the app became more and more what the users' needed.

Next steps

1

Continue to receive user feedback to further refine the app.

2

Prioritize features requested by users through out the product lifecycle.

3

Continue to build a bond with the user base of the application.

Let's connect!



Thank you for reviewing my work and the Timecard App! If you would like to discuss this project or other projects I have worked on throughout my career, please contact me below.

LinkedIn: [Ken Ressler](#)

Thank you!