ShiftUp

Scheduler for Shift Workers

Reina Villanueva

Google

Project overview

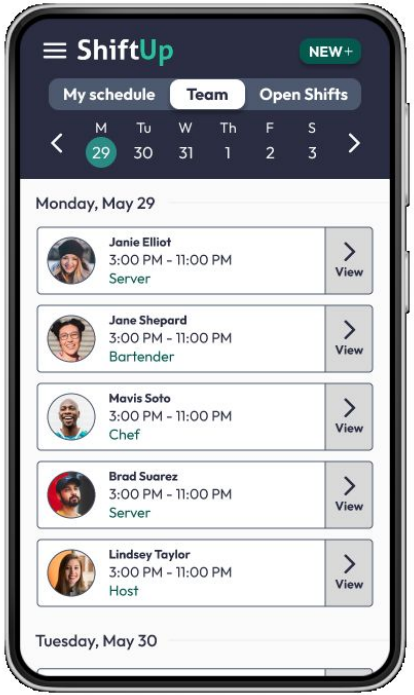
The product:

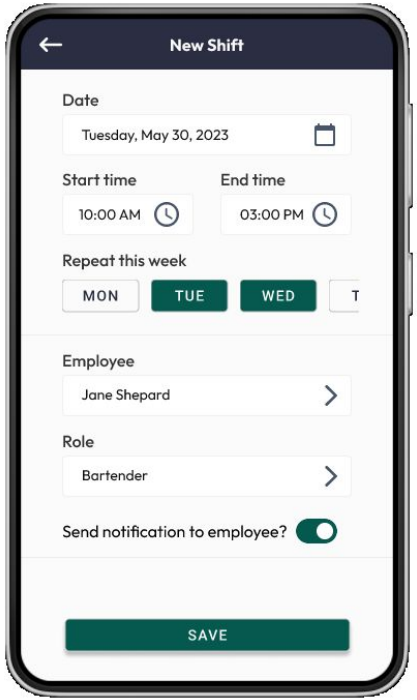
ShiftUp is an employee scheduling app used in businesses in metropolitan areas. They offer increased manageability of employee work hours. ShiftUp targets customers like managers and shift-based employees.

Project duration:

6 months

January 2023 - June 2023





Project overview

The problem:

Managing schedules can be very tedious and take a long time to do, especially if many employees are involved.

The goal:

Design an app that allows users to better manage their employees' work hours.

Project overview

My role:

UX Designer & Researcher

Responsibilities:

Empathize, define and ideate design solutions, paper and digital wireframing, low and high-fidelity prototyping, conduct usability studies, accounting for accessibility, and iterating on designs.

Understanding the user

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

User research: summary

To better understand the users and their needs, I conducted foundational research and empathized with the use of empathy maps, personas, problem statements and user journey maps.

The primary group of users identified through this initial research are managers of shift-based employees who still used the traditional way of creating schedules through spreadsheets. According to the collected data, time inefficiency was the main factor for the users' needs for the product.

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User research: pain points

1

Time Efficiency

Planning the schedule for many employees can use up a significant amount of the manager's time

2

Cognitive Load

Planning can also feel overwhelming which then becomes prone to scheduling errors

3

Visibility

Lack of quick access and visibility can lead to confusion amongst the employees

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Joseph Gates

Age: 32-50
Education: BA in Business Admin.
Hometown: Charlottetown, P.E.I
Family: Married
Occupation: Manager

“I know what needs to be done; it’s just a matter of doing it right.”

Goals

- Improve employee schedule planning efficiency.
- Increase mental capacity to manage more people
- Ease access to schedule for himself and his employees for better visibility

Frustrations

- “Having to keep track of so many people’s hours can be quite stressful sometimes.“
- “Working on the shift spreadsheet can be annoying to manage on mobile because of how small the screen is.”

Joseph Gates is a pub manager who graduated with a business administration background. With nearly 5 years of experience working as a manager, he feels quite confident in his ability to manage and delegate work to his employees. However, as the business is growing, the number of employees he has to manage is becoming more and more difficult. He needs a tool that can help him manage his employees’ schedules faster and more efficiently to keep the business running smoothly.

Problem statement

Joseph is a **full-time working manager** who needs a **better way to manage the work hours of his employees** because they are starting to **feel overwhelmed** by the growing number of employees they have to manage every week.

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User journey map

Goal: Improve efficiency in scheduling hours for employees

ACTION	Open spreadsheet	Review upcoming work week	Review employees	Allocate hours	Post schedule
TASK LIST	**A.** Go to Google Sheets **B.** Find spreadsheet used to keep track of employee schedules **C.** Select spreadsheet	**A.** Open calendar **B.** Check for any upcoming holidays **C.** Count number of work days	**A.** Count number of available full-time **B.** Count number of part-time employees	**A.** Calculate the number of available work hours **B.** Allocate hours to every employees **C.** If required, shift hours around **D.** If required, allocate extra hours	**A.** Print out schedule **B.** Post schedule in employee room
EMOTIONS	Apathetic about searching the schedule sheet	Curious to see what the upcoming week will look like Excited to see any holidays, if any	Alert on making sure no employees are missed in the counting	Anxious about making sure every employee has enough hours in the week Stressed about having to move shifts around if needed Stressed about not having enough available employees to cover the week if some are unavailable (sick, personal day off, etc)	Relieved about scheduling being done for the week
IMPROVEMENT OPPORTUNITIES	Create an app for keeping track of schedules	Have holidays highlighted for instant visibility	Assign colour codes for full-time and part-time employees	Display grid to represent the hours that need allocating Highlight hours that are not yet allocated to indicate action is still needed Allow click and drag motion to move shifts around	Publish schedule in app to give every employee instant visibility

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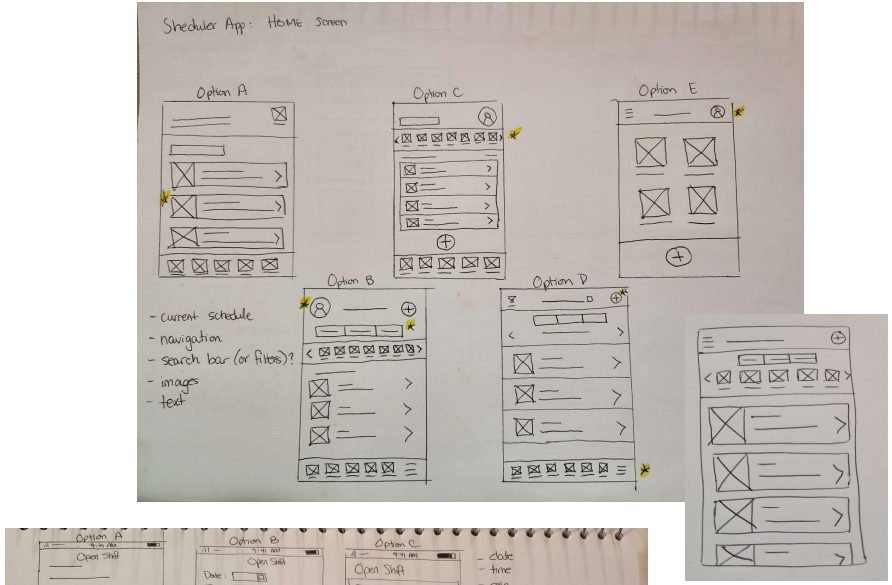
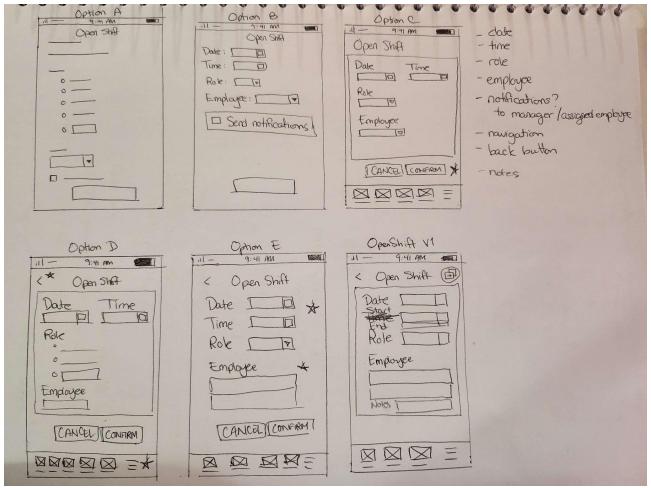
Starting the design

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

Paper wireframes

By drafting multiple versions for each screen, this process ensured that I came up with as many ideas as possible to address user pain points before moving on to digital wireframes. Because this app had the potential for displaying a lot of data, I prioritized simplicity in the designs to encourage as much confidence in users can when navigating through the user flows.





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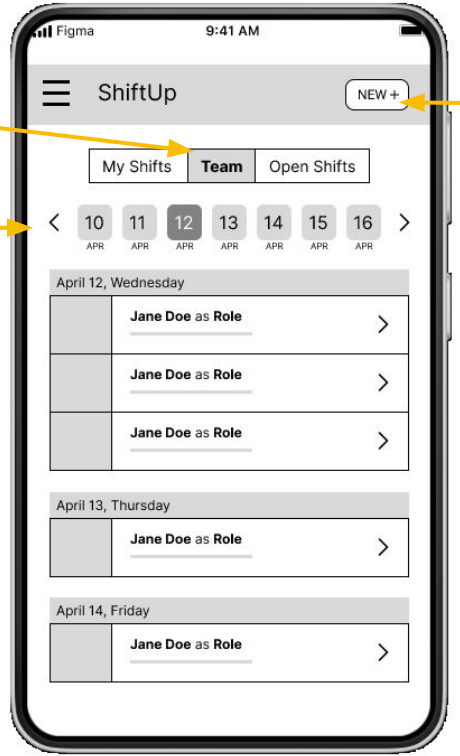
Digital wireframes

As the initial design phase continued, I incorporated changes to the screen designs based on the feedback and findings from the user research.

This button acts as a tab to switch the screen to a list of shifts assigned to the user's team.

Date selector acts as a filter for the shifts displayed



This button makes it quick and easy for the user to create new shifts.

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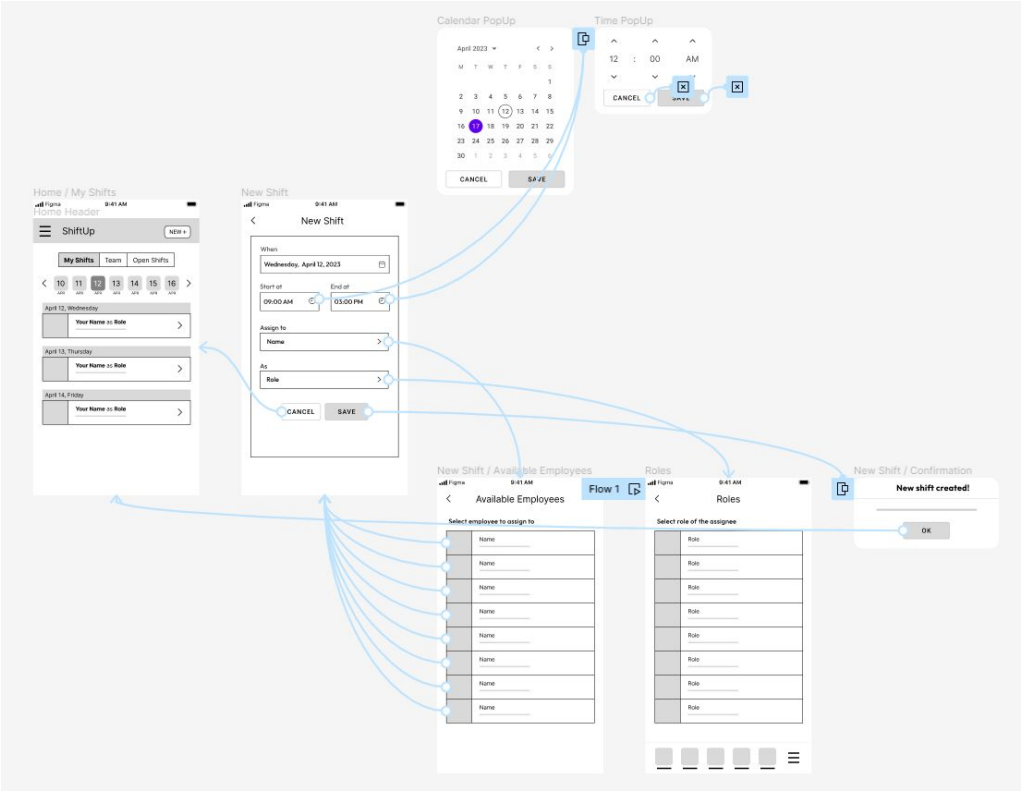
Low-fidelity prototype

The low-fidelity prototype connected the primary user flow of creating a new shift so the prototype could be used in a usability study with users.

View the ShiftUp
[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 needed a better visual cue when finding the “new” shift button
2. Users feel overwhelmed when given too many choices
3. Users feel more confident when there is consistency

Round 2 findings

1. Users wanted an option to select which days of the week to create the new shift for

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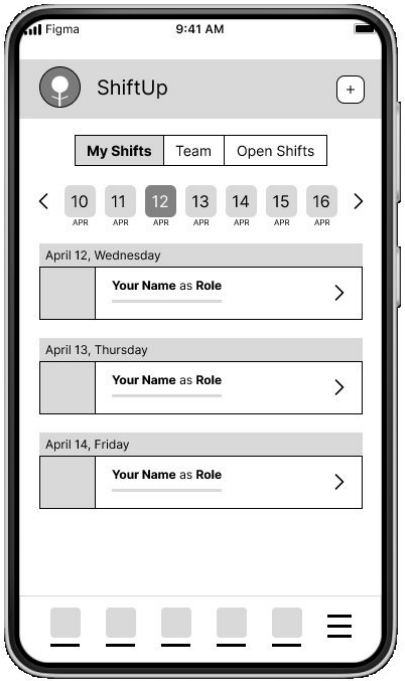
Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

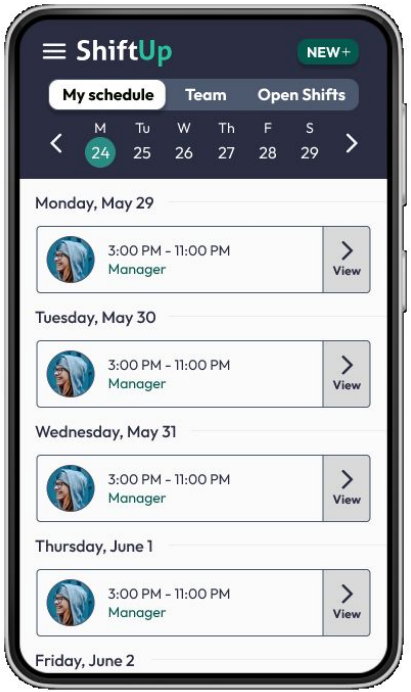
Mockups

Early designs displayed a CTA “+” button at the top right of the screen for a quick and easy way to access the shift creation screen. But after the usability studies, I added the label “NEW” to **increase visibility and meaning** to the button.

Before usability study



After usability study



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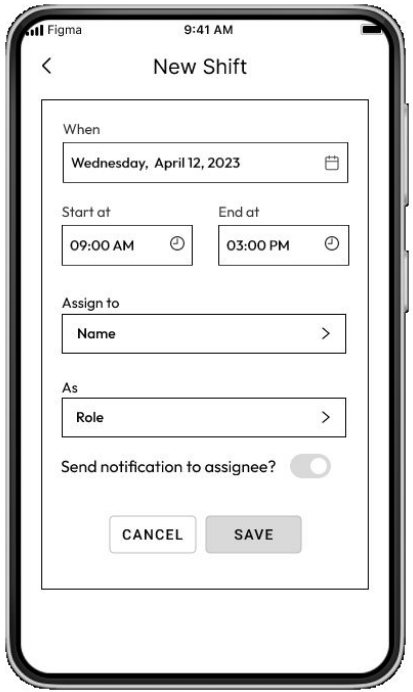
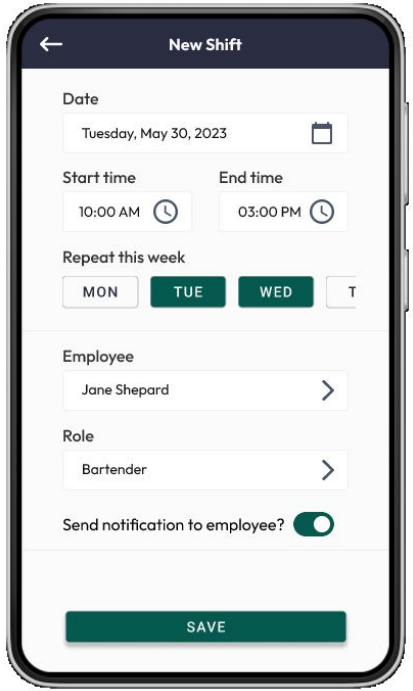
Mockups

In the second usability study, users pointed out a missing option which they thought would be vital with the use of the shift creation feature. This was a day selector for the user to indicate which days of the week the shift would be created for. By adding this selection, it allowed the users to **avoid repetition of work** when having to create shifts with the same details but different days.

Before usability study



After usability study



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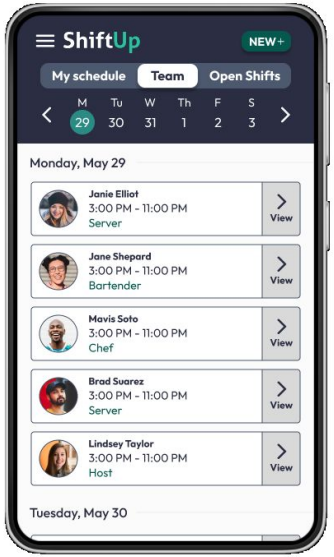
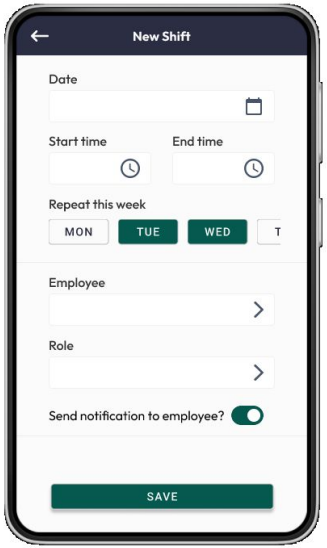
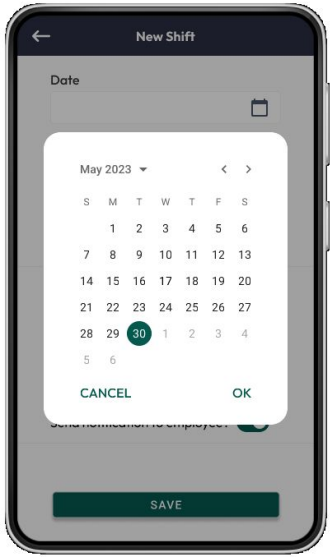
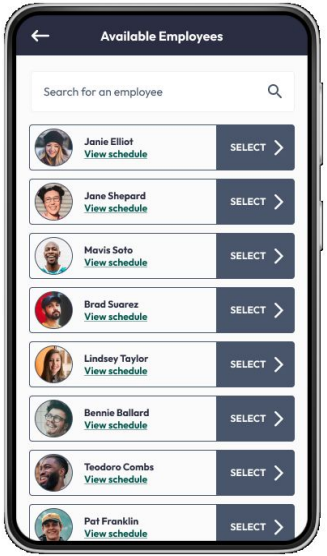
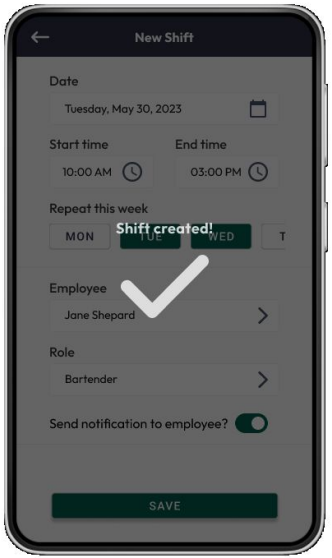
Mockups


ShiftUp
NEW+
My schedule
Team
Open Shifts
M Tu W Th F S
29 30 31 1 2 3
Monday, May 29
Janie Elliot
3:00 PM - 11:00 PM
Server
View
Jane Shepard
3:00 PM - 11:00 PM
Bartender
View
Mavis Soto
3:00 PM - 11:00 PM
Chef
View
Brad Suarez
3:00 PM - 11:00 PM
Server
View
Lindsey Taylor
3:00 PM - 11:00 PM
Host
View
Tuesday, May 30


New Shift
Date
Start time
End time
Repeat this week
MON
TUE
WED
T
Employee
Role
Send notification to employee?
SAVE


New Shift
Date
May 2023
S M T W T F S
1 2 3 4 5 6
7 8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 1 2 3 4
5 6
CANCEL
OK
SAVE

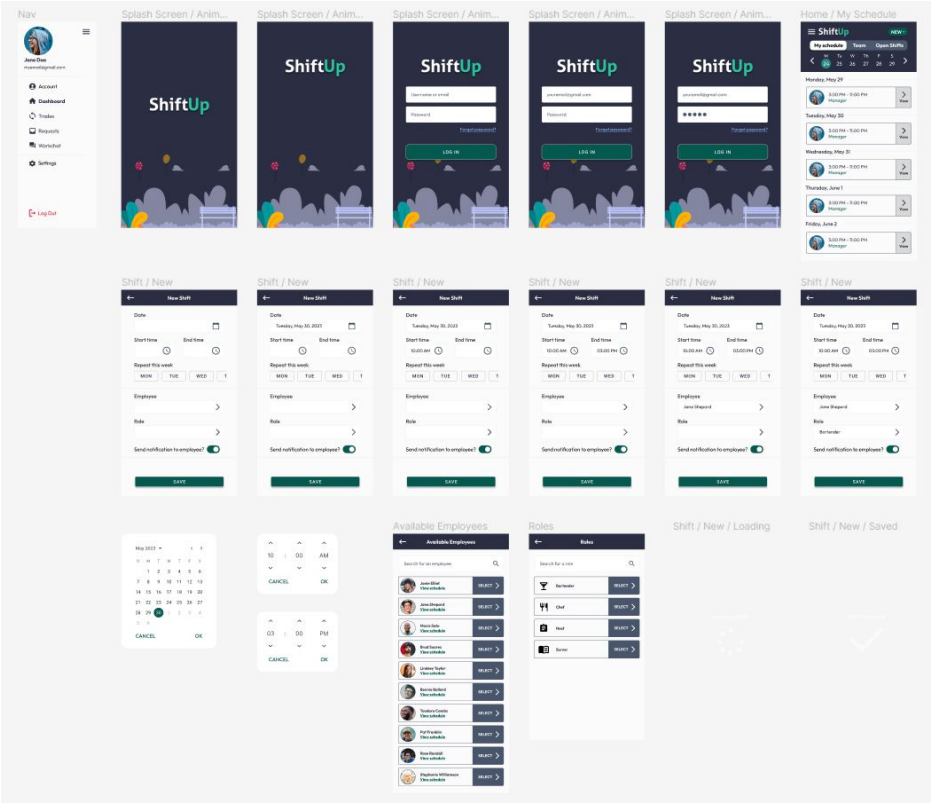

Available Employees
Search for an employee
Janie Elliot
View schedule
SELECT
Jane Shepard
View schedule
SELECT
Mavis Soto
View schedule
SELECT
Brad Suarez
View schedule
SELECT
Lindsey Taylor
View schedule
SELECT
Bennie Ballard
View schedule
SELECT
Teodoro Combs
View schedule
SELECT
Pat Franklin
View schedule
SELECT


New Shift
Date
Tuesday, May 30, 2023
Start time
End time
10:00 AM
03:00 PM
Repeat this week
MON
TUE
WED
T
Shift created!
Employee
Jane Shepard
Role
Bartender
Send notification to employee?
SAVE

High-fidelity prototype

The final high-fidelity prototype presented a cleaner and simpler approach to seeing shift schedules and creating shifts. It also addressed user needs for a day selector when creating shifts for a more complete feature.

View the ShiftUp
[high-fidelity prototype]



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Accessibility considerations

1

Used icons and labels to help make input fields be more recognizable in forms.

2

Adjusted colors for each screen to conform to A11y's standards for color contrast.

3

Ensured consistency throughout designs to promote familiarity in user experience.

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Going forward

- Takeaways
- Next steps

Takeaways

Impact:

The app encourages a sense of organization and control when it comes to shift management.

One quote from peer feedback:

“This app is way better than managing spreadsheets! I could definitely see myself using something like this to manage my employees.”

What I learned:

While designing the app, I learned that designs can never be perfected; only changed towards perfection as long as the user’s needs are met.

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Next steps

1

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

2

Conduct more user research to explore any new features that can be added into the app.

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Thank you!

Thank you for your time reviewing my work on the ShiftUp app!

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