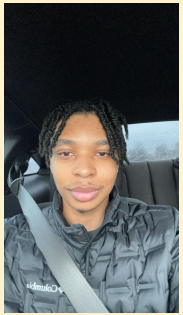
Bike Works Volunteer Management

Sponsored by Bike Works

The Team

Troy Lu
Project Manager
Developer

Tyler Takeuchi
Developer
User Research



Jaiden York
UI/UX Design
User Research

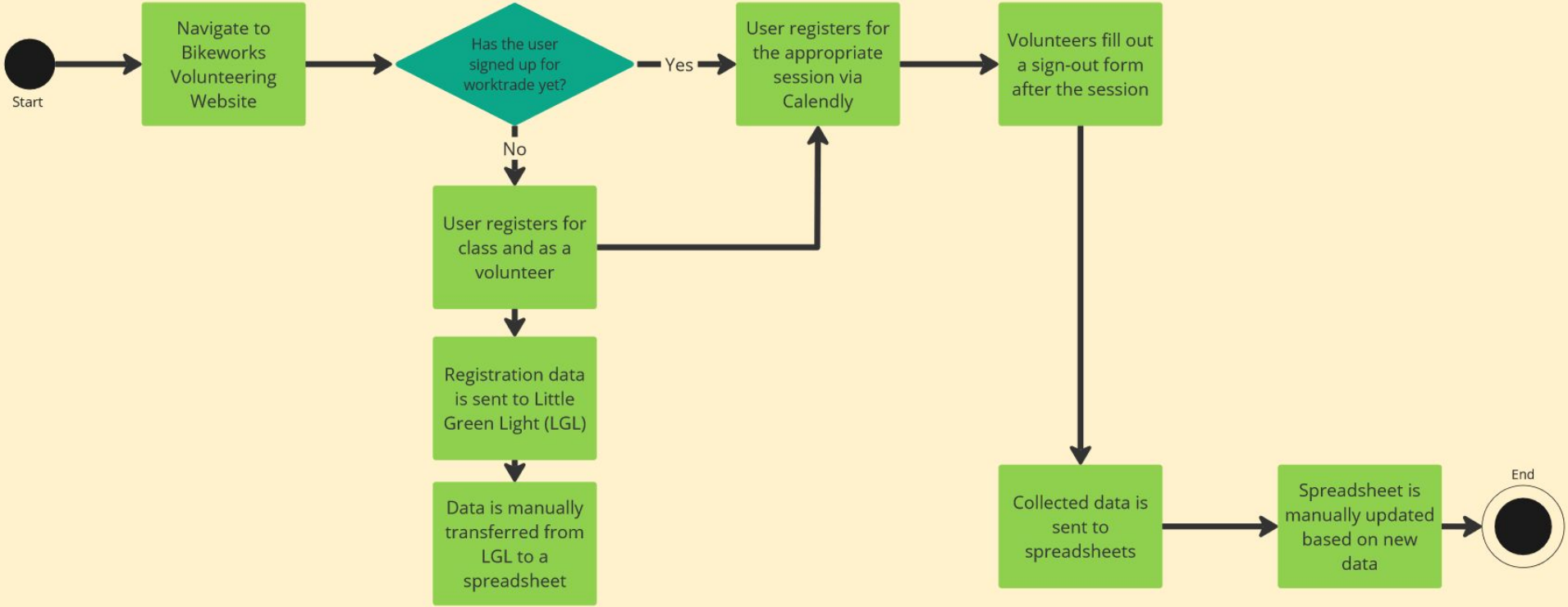
Alexei Zhang
UI/UX Design
User Research

Matthew Cagle
Data Visualization
Back-end Development

Problem Context

- Bike Works tracks volunteer hours for work-trade system
- Current database system requires too much manual labor
- Time-consuming and prone to error

First name	Volunteer type	Hours at VRP today	Which class(es) are you completing work trade for?	Total work trade hours owed	Questions, comments, or feedback:	DROP INS
	Registered online (Calendly)					
	Registered online (Calendly)					
Goeun	Work trade	3	Bike repair 101	Not sure		
Eugine	Work trade	2	Bike repair 201	Not sure		
	Drop-in					
Wen	Work trade	2	Bike repair 101	9		
Simone	Work trade	2	Bike repair 101	6		


Start
Navigate to Bikeworks Volunteering Website
Has the user signed up for worktrade yet?
Yes
No
User registers for the appropriate session via Calendly
Volunteers fill out a sign-out form after the session
User registers for class and as a volunteer
Registration data is sent to Little Green Light (LGL)
Data is manually transferred from LGL to a spreadsheet
Collected data is sent to spreadsheets
Spreadsheet is manually updated based on new data
End

How might Bike Works staff achieve a greater level of efficiency when tracking work trade data so that they can focus their time on more important tasks, such as hosting classes and fixing/selling old bikes?

Research Insights

- Automation can allow for -human error , +efficiency, +data quality
  - Low-code/no-code solutions provide various automation functionalities

- Existing System → New System
  - **Communication** is required between all involved parties to ensure for a useful product
  - Positives and negatives of low-code/no-code solutions in the context of our problem
  - Multiple views based on type of user (volunteer/staff)

Start

Go to Bikeworks Volunteering Website

Can't find what they are looking for on website

Limited technological access or experience

Has the user signed up for worktrade (WT) yet?

Yes

No

Register for a class and fill out payment/worktrade form.

Can't afford tuition or to owe worktrade

None of the dates work for them

User data form is transferred into Little Green Light

Worktrade user data is manually transferred to 'WT Database'

Unable to properly fill out application for whatever reason (Residence issues, no technology)

Navigate to Volunteer Application

Application is rejected for some reason (Criminal history/sex offender/etc.)

Fill out Volunteer Form

Under 18 but still want to be involved

Navigate to Volunteer Repair Party Page to sign up for classes

Screen and approve Volunteer Application

Personas: Volunteer Management System

Jim | Staff Member at Bike Works

- Frustrated with the amount of manual effort required by the current system
- Wants to spend less time working on the spreadsheet

Personas: Volunteer Management System

Laura | Bike Works Work Trade Volunteer

- Struggles to find how many hours she has left on her work trade.
- Wants to spend less time browsing the Bike Works website and asking staff regarding her remaining work trade hours.

Key Features

softr

Airtable

- **Softr**: User-facing interface, used by staff and volunteers
  - Displays information related to work trade volunteers
  - Automates emails detailing their work trade progress and other information

- **Airtable**: back-end system, stores data displayed by Softr
  - Intakes data from a user-submitted form
  - Automations: completion/inactivity emails and data inputs

Check Volunteer Hours VRP Sign-Out Form REGISTER FOR VRP

Two Wheels. Endless Possibilities.

Bike Works promotes the bicycle as a vehicle for change to empower youth and build resilient communities. Since 1996 we've worked to educate and empower youth, and make bicycling accessible and affordable to the Seattle community.

Check Volunteer Hours

Made with Sefh

Ethical Considerations

- Volunteer Confidentiality: restricting access to volunteer-specific information.

- Transparency: volunteers have the right to know what the organization does with their information.

- Beneficence: ensure the system is designed and implemented to maximize the benefits for both volunteers/organization.

User Testing & Validation

- Approach: Functionality → Design/Aesthetics
- Weekly testing of revised and new features over Zoom with sponsor

As of 5/10/24, Bike Works has implemented our system into their workflow, and additional feedback will be provided in the upcoming week(s).

Next Steps

- After Capstone, we will be transferring ownership of the Airtable and Softr projects to Jim, who we have been working with over the last two quarters

Thank you for your time!

Questions?