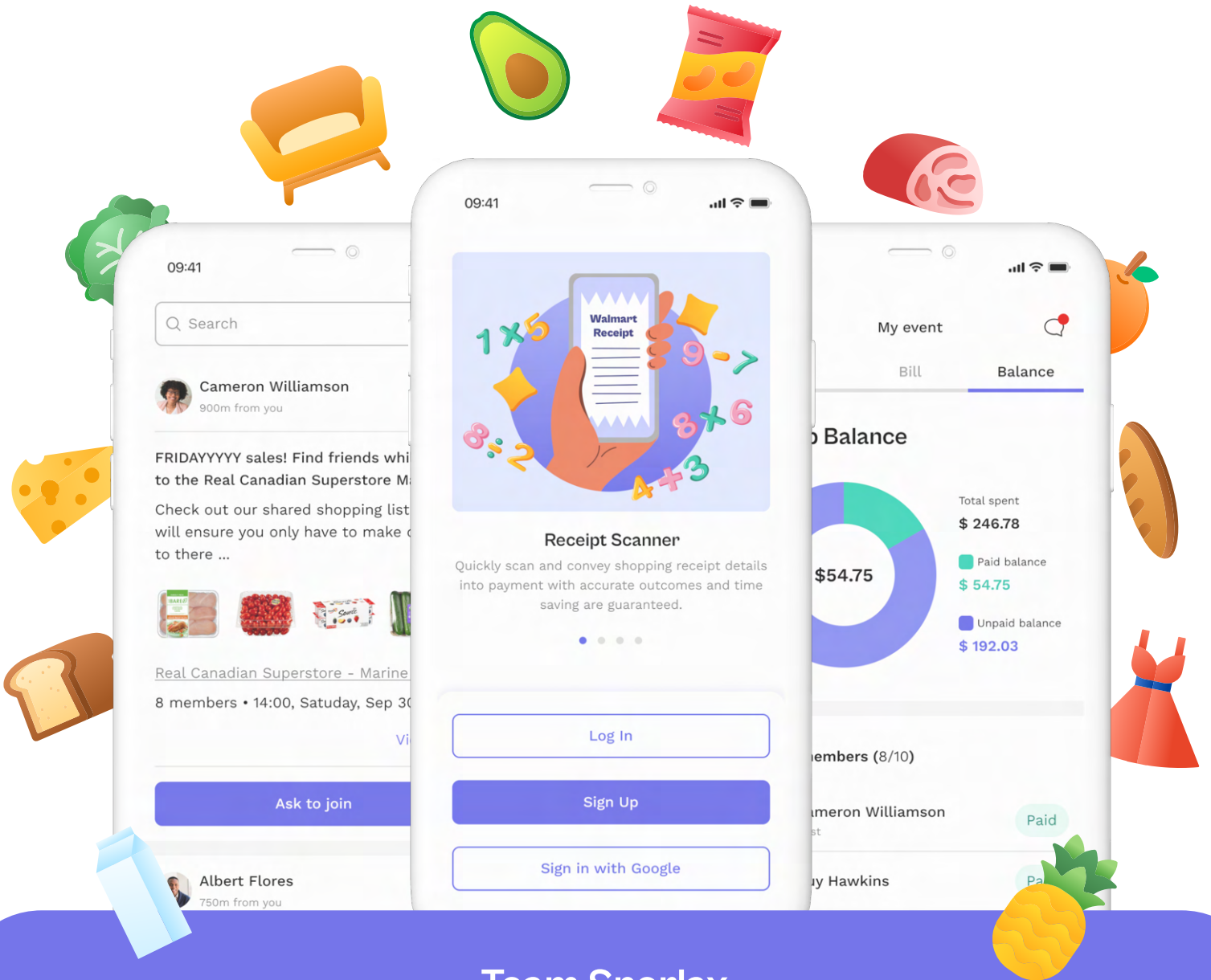




Buy Together, Better Together.



Team Snorlax

Valentina Abanina • Shijie You • Phat Thuan Nguyen • KaranPal Singh
Hyewon Kang • Thushara Suresh • Taras Ivanov • Jaskaranvir Deogan



Table of Contents

About Splink

Project Overview	01
Main Features	02

Marketing Analysis

Market Research	04
User Personas	05
Competitive Analysis	07

Project Timeline

Design Milestones	09
Development Milestones	10

Design Process

User Flow	11
Wireframes	13
Branding	17
UI Kit	18
UI Mockups	22

Technical Overview

Tech Stack	27
System Architecture	28
Database Model	29
Component Tree	30
Technologies Used	31

Monetization Strategy

32

Team

33

References

35

Project Overview

What is Splink?

Splink - is a mobile application that gives users the ability to participate in community based grocery shopping events, strengthening relationships with neighbours while finding grocery deals. Users can connect to discover good community-focused shopping experiences, take advantage of bulk item purchasing, as well as discount opportunities. The receipt breakdown features allow users easily split the shopping bill, and access more grocery markets outside the digital space.

Problem

According to Statistics Canada, monthly wholesale sales exceed retail sales by C\$20 billion. However, despite the growing popularity of bulk purchases, consumers face various challenges:

- Products in wholesale stores are generally at a lower price, but people have to buy them in large proportions. It may result in overbuying and food waste.
- Purchase and renewal of membership are expensive and require membership authorization.
- Wholesale products can be bulky, heavy, difficult to carry and transport, as well as require a large space to store.

Moreover, our research showed that Canadian residents experience:

- Difficulty in managing living costs and daily expenses, money-saving challenges, debts, and bad credit history.
- Lack of opportunities to improve community connections and help the neighbours.
- When ordering goods online, customer preferences are unknown and it is difficult to get product recommendations.

Solution

Splink helps members of the neighborhood create or join shopping groups and make joint purchases, splitting the bill afterward. It is not only convenient and economical but also enhances community connections and turns a weekly routine into an exciting event!

Main Features



Shopping Groups

This simple and intuitive platform allows users to create or join shopping groups based on a set location.

- The user can act as a host and publish the event providing a description (date and time, store address and name, number of participants, shopping list, etc.), control the composition of the groups, bill splitting, payment process, and send reminders to payers.
- Users who prefer to join the group can send a request to the host, input the number of items to the shopping list, discuss event details, share photos in the group chat, and see the group balance (the total and by the member).



Split Bills

This feature allows to split the bill easily and precisely in equal portions or based on the cost of items purchased by each group member. The payer can be the organizer of the event or any of the members of the group appointed by the host.

- Bill splitting equally implies splitting the total amount, including taxes (GST/ PST) and fees.
- Bill splitting by member starts with checking the preliminary shopping list and making the necessary adjustments (buyers, quantity, product types). The final list would be matched with the receipt, taxes, and fees would be added and the amount split accordingly.

NOTE: All money trades would be done outside the platform.



Receipt Scanning

Processing and converting receipt details (scan of the receipt) into payments by mapping them with a pre-planned shopping list.



Tracking Group Balance

Allows group members to view the group balance, keep track of payments made by each member and receive or send notifications (based on the user's role) regarding outstanding balances.



Group Discussion (Chat)

Communication between members of the shopping group is carried out by exchanging text messages, photos, or images downloaded from the gallery or taken with the camera phone. The user can search chat messages by inputting keywords into the search field and leave a discussion if the group balance was settled.

Market Research

Geographic

- Pilot: British Columbia, Canada
- High-level: Global

Demographic

- Gender: male and female
- Age: Young adults (16-25), Adults (25-55)

Income

- Lower-Middle
- Middle income

Psychographic

- Striving to be financially independent
- Daily consumption management
- Food lovers, cooking enthusiasts
- Actively involved in the local community
- Care for environmental protection
- Smart consumption

Behavioural

- Budget-conscious
- Preferring to buy goods in low-cost and wholesale stores
- Avoiding food waste and the use of plastics
- Planning to buy the necessary things in the right amount of consumption
- Tracking spending
- Making routine vs. spontaneous purchases
- Using mobile applications on a daily basis

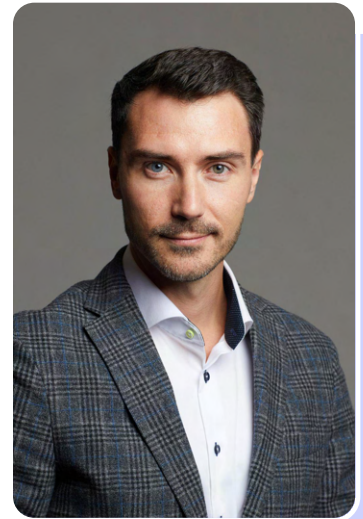
Persona A - Event Owner

Quote

"I am a goal-driven person who likes to take control of the situation and believe that with hard work and persistence, one can achieve success in life."

Bio

Steven is a Junior Civil engineer working in the construction industry. Currently, he is renting a studio with his girlfriend, but aiming to save money for a down payment to be able to purchase a condo in the near future. He likes to participate in community events and perform basic maintenance on his car.



Demographic

- **Age:** 29
- **Location:** Burnaby, BC
- **Occupation:** Civil Engineer
- **Education:** University
- **Income:** C\$69k



Psychographic

Personality

- Wise
- Loyal
- Motivated
- Organized

Interests

- Modern technology
- Healthy products
- Sports cars
- Networking

Influences

- Magazines and Newspapers
- Social media
- Professional athletes
- Technology Trends

Motivations

- Homeownership
- Stability
- Saving money
- Achieving the high social status

Goals & Needs

- Planning shopping to prevent overspending and food waste
- Strengthening community connections
- Changing shopping strategies toward purchasing wholesale products
- Finding an opportunity to utilize membership cards more efficiently

Pain points

- The limited area of the apartment makes it inconvenient to store products in bulk
- Buying perishable wholesale products results in food waste
- Inefficient and irregular grocery shopping leads to cost overruns
- Realized, that splitting the grocery bill can be time-consuming and erroneous

Persona B - Event Member

Quote

"I always follow my dreams, happy to explore new adventures and meet wonderful people!"

Bio

Brittany recently moved to BC from Brazil following her dream of becoming a film director. Currently, she is a first-year UBC student, who is sharing a house with 3 other girls close to the campus. She enjoys living independently from her parents and likes to participate in student parties.



Demographic

- **Age:** 19
- **Location:** Vancouver, BC
- **Occupation:** University student
- **Education:** High school graduate
- **Income:** C\$20k



Psychographic

Personality

- Extrovert
- Curious
- Imaginative
- Caring

Interests

- Volunteering
- Shopping
- Blogging
- Cooking

Influences

- Peers
- Food bloggers
- Technology
- Celebrities

Motivations

- Saving money
- Convenience
- Integration into the local community
- Financial independence

Goals & Needs

- Optimizing budget
- Finding better grocery store options nearby
- Finding campus residents, who have a car to go shopping together
- Quickly and accurately dividing bill amounts by the number of participants

Pain points

- Constant misunderstandings about the splitting of expenses
- Don't know how to read a bill properly, identify all fees and taxes
- Not owning a vehicle makes shopping less convenient
- Sometimes forgets a pre-made shopping list at home

Competitive Analysis



Splitwise

splitwise.com

Splitwise is a web and mobile app allowing groups of people, like friends and roommates to track bills and other shared expenses. It focuses primarily on splitting the bills between individuals. Almost half of the primary users reside in North America (USA 36% and Canada 10%)

According to similarweb.com statistics



Evenfy

evenfy.com

Evenfy is an app that focuses on group expenses. It is available for both iOS and Android phones. Users can add photos or PDFs of their shared bills, track expenses with updated info, get a clear overview of the event's cost structure, and communicate by exchanging text messages to help organize the sharing.



Tricount

tricount.com






Tricount is a web and mobile app that provides means for organizing group expenses (trips, holidays, meals, etc.). It lets the user break down the budget of a group and track expenses among the family, roommates, or friends. The majority of the app users are from Europe, however, 10% of the users reside in Canada and that number is growing (statistical data from similarweb.com).



Splittr

splittr.io

Splittr is a free app available on iOS, which is designed to help larger groups split expenses. After making a purchase, a group member needs to enter the details manually. The same procedure is when the user receives payment from other group members. The app will track how much the user spent, and the amount of money the group and each individual owe to this person.

Products					
Shopping Group Events	✓	✗	✗	✗	✗
Group Chat	✓	✗	✓	✗	✗
Bill Splitting	✓	✓	✓	✓	✓
Receipt Scanning	✓	✓	✗	✗	✗
Tracking Group Balance	✓	✓	✓	✓	✓

How Splink differs from the competition

After analyzing the main features of our competitors, we conclude that despite the fact that they provide users with the opportunity to form expense-sharing groups, none of them allows the creation of a proper shopping group with the ability to share a shopping list or organize a shopping event. In addition, when splitting a bill, competitors offer manual entry of the payment amount, and only Splitwise has a receipt scanning feature for the users of the PRO version.

Our application stands out from its competitors by combining the financial and social components. It is not only a convenient tool for shopping planning or conducting calculations, but also a community-driven platform that allows people from the same neighborhood to establish friendly connections.

Design Milestones

Week

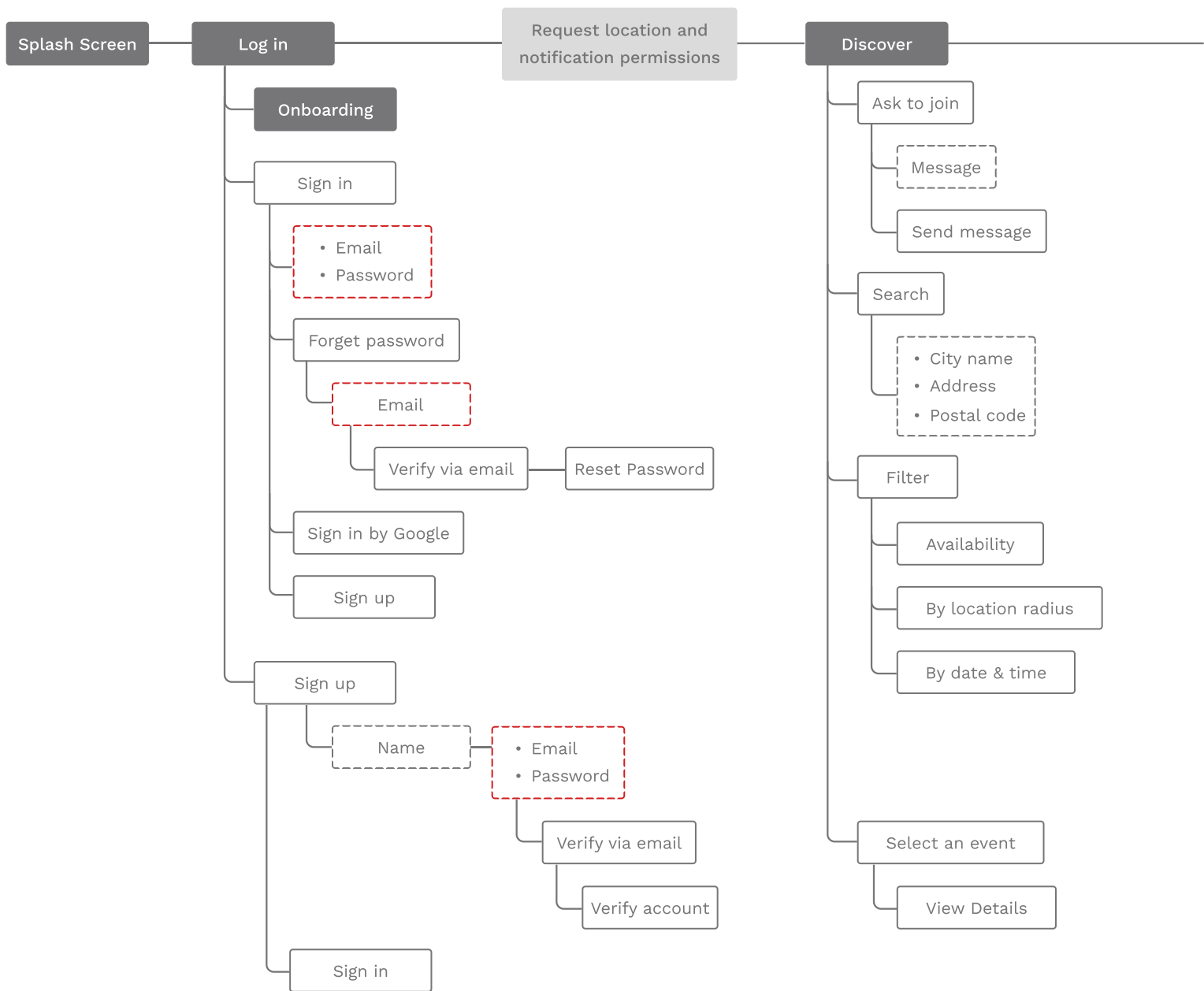
- 01 Project Ideation and Planning / Platforms and Frameworks
- 02 Market & Competitors Analysis / Persona / User Flow / Main Features
- 03 User Flow Revision / Branding Guideline / Wireframes v.1
- 04 UX Design Revision / Logo Design Iterations / Feature Flow Complete
- 05 Logo Design Complete / UI Kit / Mockups v.1
- 06 Mockups v.2 / Project Proposal Content / Illustrations
- 07 UI Design Revision / Prototype Scenario / Marketing Strategy
- 08 Design Handoff / Project Proposal Design / Promotional Website
- 09 Social Media Assets / Team Photos / Video
- 10 Presentation Script / Project Proposal Complete
- 11 Presentation Deck / Rehearsal
- 12 Final Presentation

Development Milestones

Week

- 01 Team Formation/Project Idea Finalization
- 02 GitHub Repo Setup and Tech Stack Research/Finalization
- 03 Database Structure, Component Tree, Database setup
- 04 Boiler Plate code for Frontend and Backend
- 05 Database Schema, Authentication, Backend Configuration
- 06 Main features Development, API Routes/ Integration of Frontend & Backend
- 07 Continue Feature buildout/Continue Frontend & Backend connectivity
- 08 Working Prototype with main features for Alpha
- 09 Front-end Development of Primary features and styling
- 10 Beta and Frontend feature development
- 11 Backend/Frontend testing and Integration testing
- 12 Final Presentation

User Flow



LEGEND

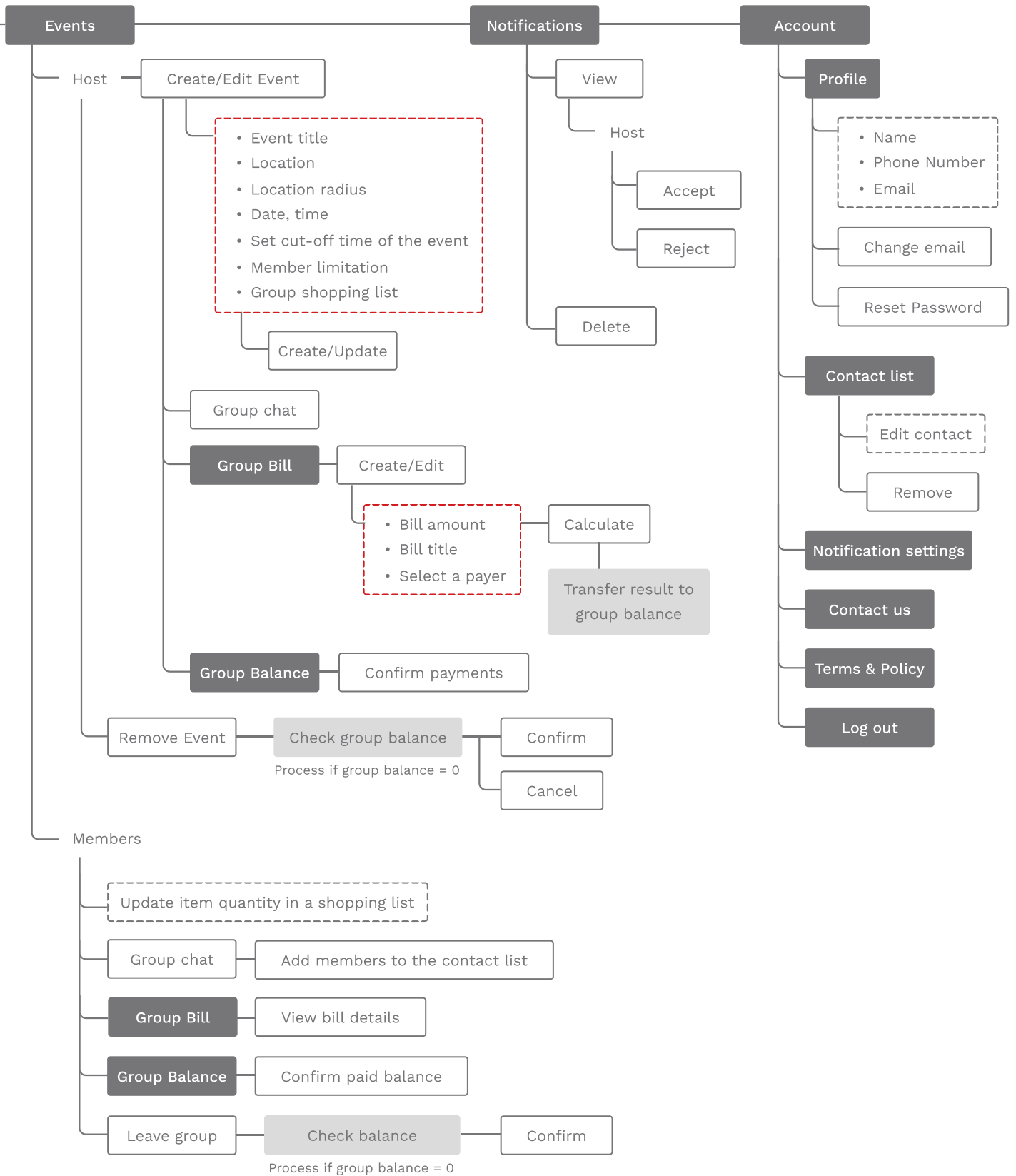
Section

User Action

User input

User input required

System action

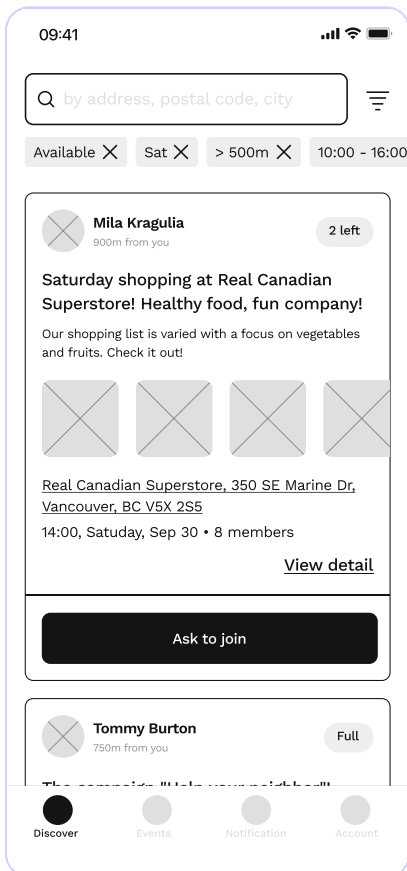


Wireframes

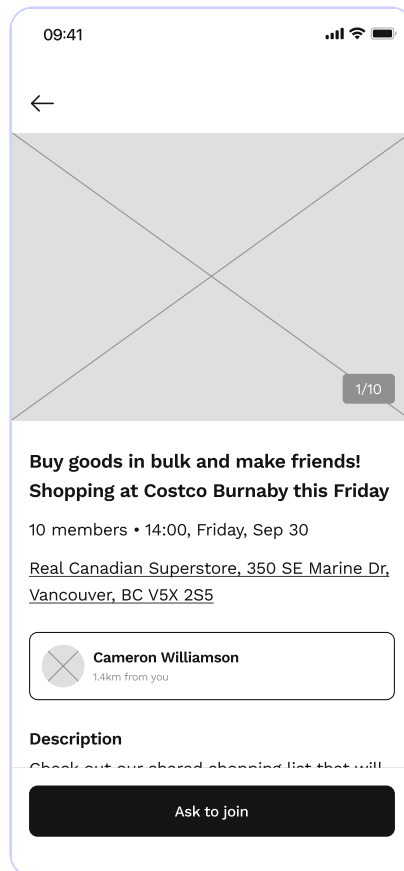
The creation of annotated wireframes helped our team to communicate the application structure, work through all elements' interactions, and test our design decisions. The wireframes have gone through several iterations to provide intuitive navigation and usability, and to accommodate different user scenarios.

Shopping Groups

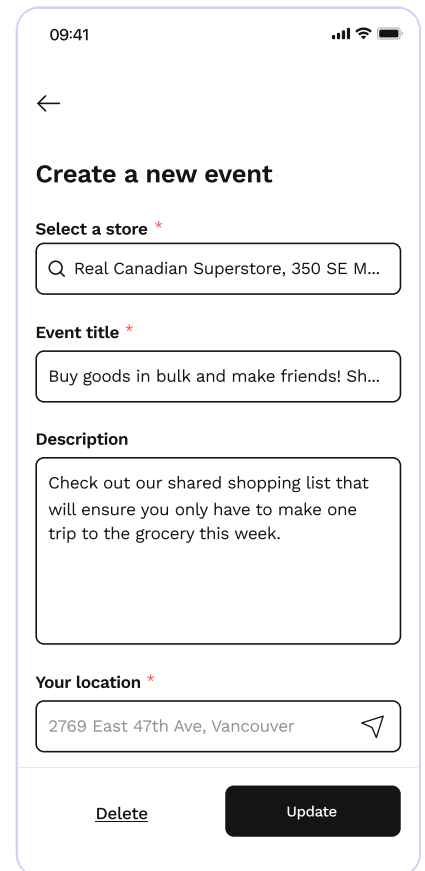
The user can create a shopping event, providing details and a preliminary shopping list. Or check ongoing events in the neighbourhood and ask to join a group that meets users' needs.



Discover event



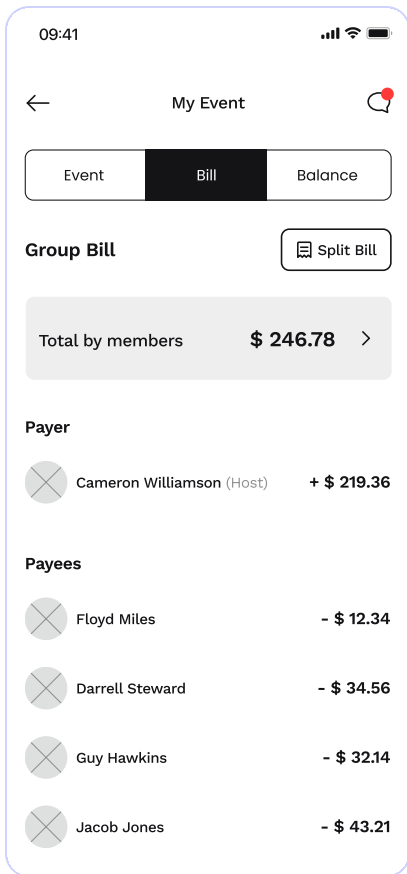
Discover event - Details



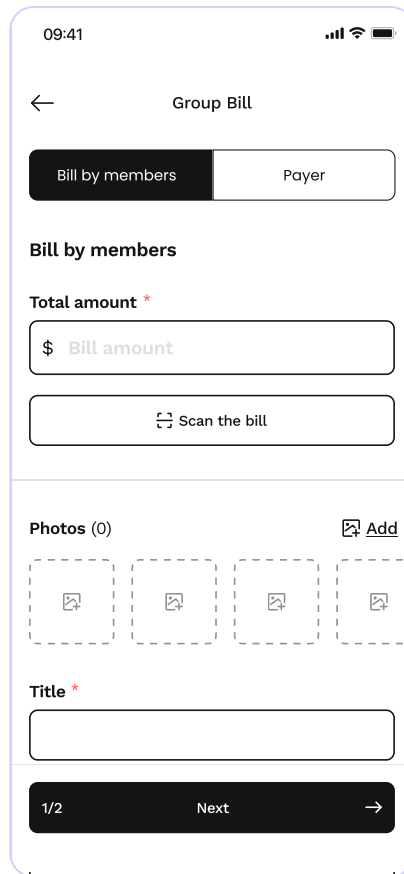
Create a new event

Split Bills and Receipt Scanning

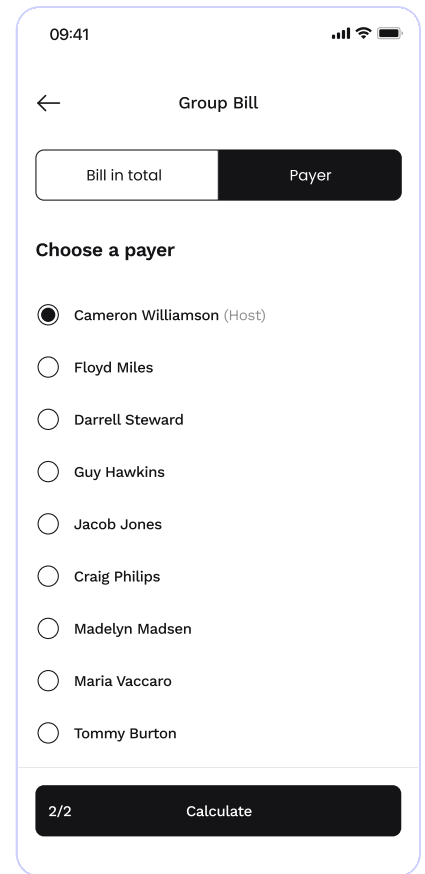
The easy and fast process of in-app receipt recognition as well as the flexibility to choose a payer and method of bill splitting: equally or by members improves the user shopping experience.



Group bill



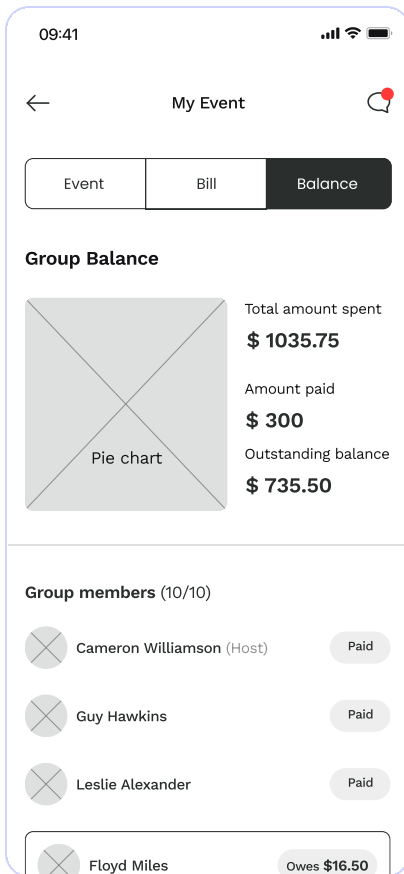
Create a group bill



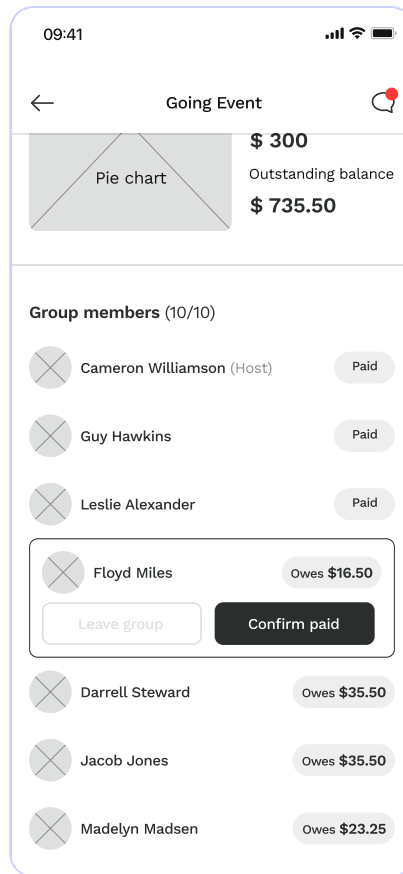
Choose payer

Tracking Group Balance

This feature allows tracking the shopping group balance presented transparently and accurately. Users will be notified about payment updates and send or receive reminders to avoid payment delays.



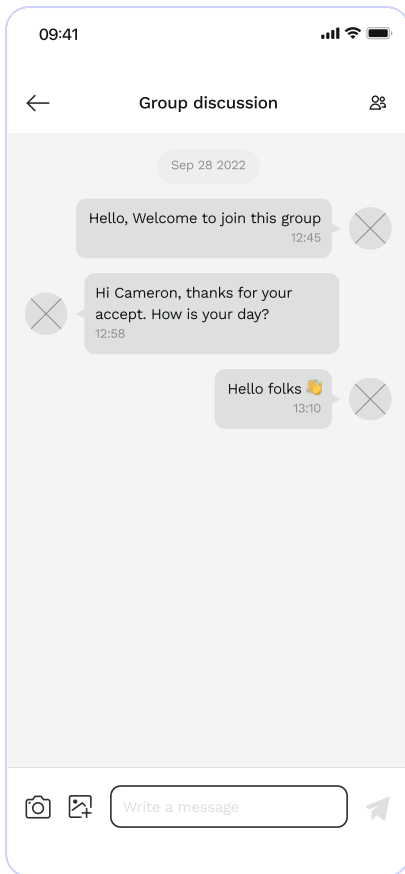
Group balance - Event owner



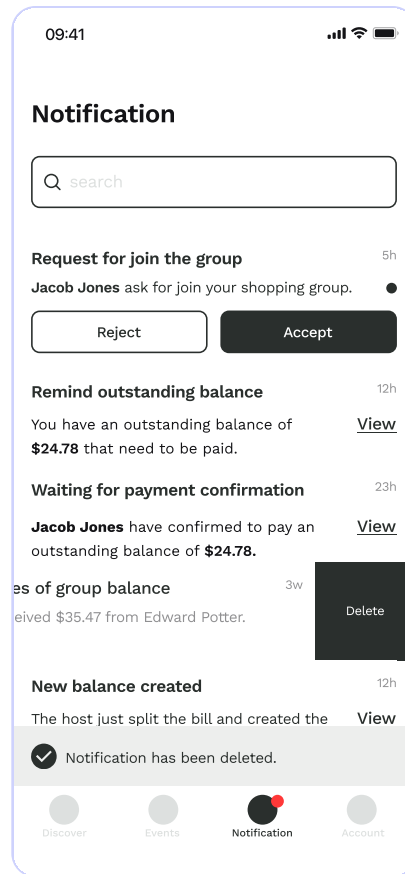
Group balance - Members

Group discussion, Notification and Account

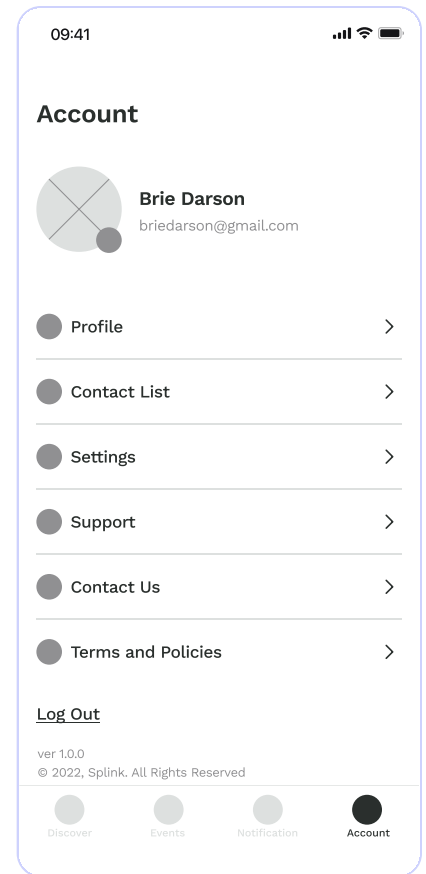
The chat function helps to clarify all the details before the event, exchanging messages and photos between group members. Notifications used to convey information and updates, encourage users to engage with an app, and send reminders. An account allows the management of users' data, contacts, and settings.



Group Discussion



Notification

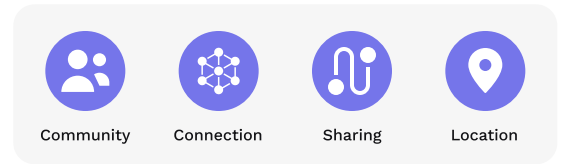


User account

Branding

Logo

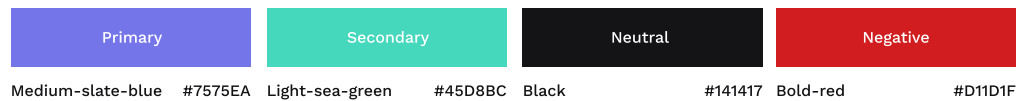
Our logo represents the following concepts: community, connection, location, and sharing. It reminds a map location sign and the bright circle inside can be interpreted as a meeting point, a close circle of people, unification, and rallying. Clear lines leading to the center resemble a road, an intersection, which indicates an organized activity.



Color Palette

The brand colours symbolize playfulness, freshness and youthfulness. The combination between medium-slate-blue and light-sea-green creates a unified contrast and can easily attract human eyes on all digital platforms.

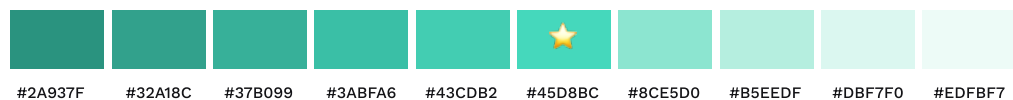
Foundations



Brand Primary



Brand Secondary



Neutral



Negative



Cabinet Grotesk

Aa

Work Sans

Aa

Text style	Weight	Size	Line height
H1	Bold	56px (3.5rem)	1.25
H2	Bold	40px (2.5rem)	1.25
H3	Bold	32px (2rem)	1.25
H4	Bold	26px (1.5rem)	1.5
H5	Bold	20px (1.25rem)	1.5
H6	Bold	20px (1.25rem)	1.5
Title	Semi Bold	20px (1.25rem)	1.5
Body	Regular, Medium, Semi Bold	16px (1rem)	1.5
Body - Small	Regular, Medium, Semi Bold	14px (0.875rem)	1.5
Button	Regular, Medium	16px (1rem)	1.5
<u>Text link</u>	Regular	16px (1rem)	1.5
Caption	Regular	12px (0.75rem)	1.5
Overline	Regular	10px (0.625rem)	1.5

Iconography



Buttons

	Normal	Disabled	Hard Pressed
Primary			
Secondary			
Dangerous			
Text button	Text button Text button	Text button Text button	Text button Text button
Text link	Text link	Text link	Text link
Icon with text	Button icon Button icon	Button icon Button icon	Button icon Button icon
Button icon			
Chip	Name X	Name X	Name X

Radio button

<input type="radio"/> Radio (Normal)	<input type="radio"/> Radio (Normal, Disabled)	<input checked="" type="radio"/> Radio (Checked)	<input checked="" type="radio"/> Radio (Checked, Disabled)
--------------------------------------	--	--	--

Checkbox


<input type="checkbox"/> Checkbox (Normal)	<input type="checkbox"/> Checkbox (Normal, Disabled)	<input checked="" type="checkbox"/> Checkbox (Checked)	<input checked="" type="checkbox"/> Checkbox (Checked, Disabled)
--	--	--	--

Input fields


	Normal	Filled	Disabled	Focus	Error
Input text	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/> Error message here
Input dropdown	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/> Error message here
Input password	Password * <input type="password"/>	Password * <input type="password"/>	Password * <input type="password"/>	Password * <input type="password"/>	Password * <input type="password"/> Error message here
Input bill	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/>	Label * <input type="text"/> Error message here
Input search	Search * <input type="text"/>	Search * <input type="text"/>	Search * <input type="text"/>	Search * <input type="text"/>	Search * <input type="text"/> Error message here
Text number	Label <input type="text"/>	<input type="text"/>			

Cards

Event (Post)

 **Name**
900m from you 2 left


FRIDAYYYYY sales! Find friends while going to the Real Canadian Superstor...
Check out our shared shopping list that will ensure you only have to mak...




[Real Canadian Superstore - Marine Drive](#)
8 members • 14:00, Saturday, Sep 30

[View more](#)

[Ask to join](#)


 **Name**
900m from you Full

FRIDAYYYYY sales! Find friends while going to the Real Canadian Superstor...
Check out our shared shopping list that will ensure you only have to mak...




[Real Canadian Superstore - Marine Drive](#)
8 members • 14:00, Saturday, Sep 30

Group Balance: \$20 [View more](#)

 **Name** Closed


FRIDAYYYYY sales! Find friends while going to the Real Canadian Superstor...
Check out our shared shopping list that will ensure you only have to mak...





[Real Canadian Superstore - Marine Drive](#)
8 members • 14:00, Saturday, Sep 30

Group Balance: \$20 [View more](#)


Users

 **Name**
800m from you

 **Name** Host ⊗

 **Name** Host ⊗ ⊕

 **Name** Host +\$ 219.36


 **Name** Host

 **Name** email ⊞ Add


 **Name** Host − 2 +

 **Name** Host x2

 **Name** Host Paid

 **Name** Host Owes: \$ 27.42

[Remind](#) [Confirm balance](#)


 **NaFloyd Milesme** Owes: \$ 27.42

[Leave group](#) [Confirm balance](#)

Users with group balance


Shopping item from the store

 **Bread** x2

 **Bread** \$00.00
Tax: \$00.00

 **Bread** \$00.00 Add
Tax: \$00.00

Shopping item with details


 **Mandarin** x3


[Remove](#) [Edit](#)


Price per unit \$ 8.00


Tax GST None \$ 0.00


3 buyers [Hide](#)

 **Cameron Williamson** (Host) − 2 +

 **Ronald Richards**

 **Kristin Watson** x1

 **Courtney Henry** x3

 **Mandarin** \$ 24.00


[Remove](#) [Edit](#)


Price per unit \$ 8.00


Qty x3 \$ 24.00


Tax None None \$ 0.00

2 buyers [Hide](#)

 **Cameron Williamson** Host − 0 +

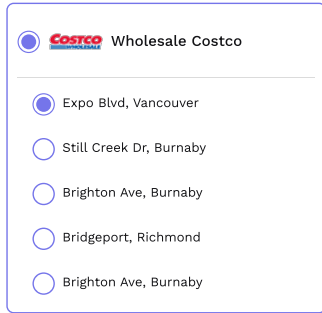
 **Ronald Richards** − 2 +

 **Kristin Watson** − 0 +

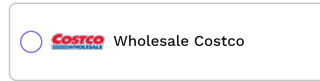
 **Courtney Henry** − 1 +

Store Selection

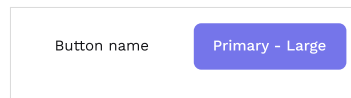
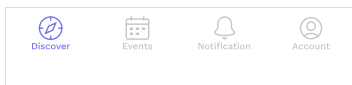
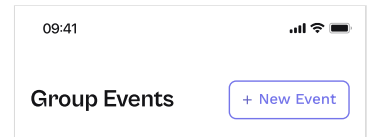
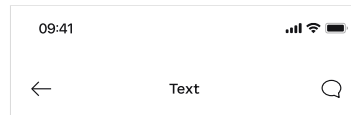
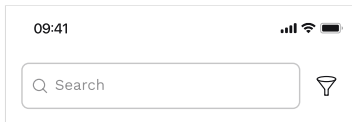
Selected



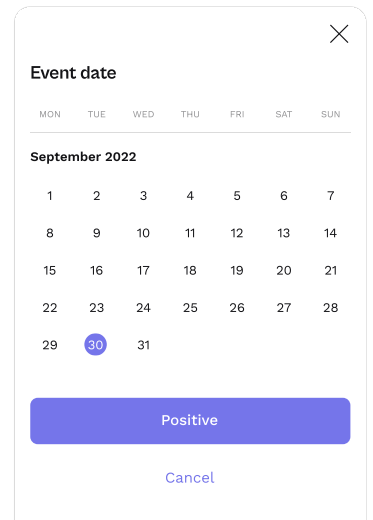
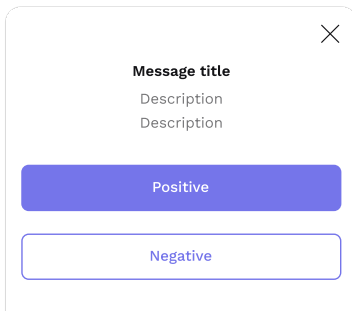
Unselected



Header & Footer



Bottom Sheet



Others

Badges



Toggle



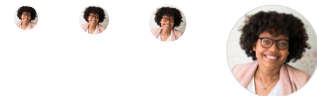
Slider



Tabs



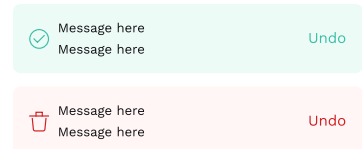
Avatar



Item photo
Photo placeholder

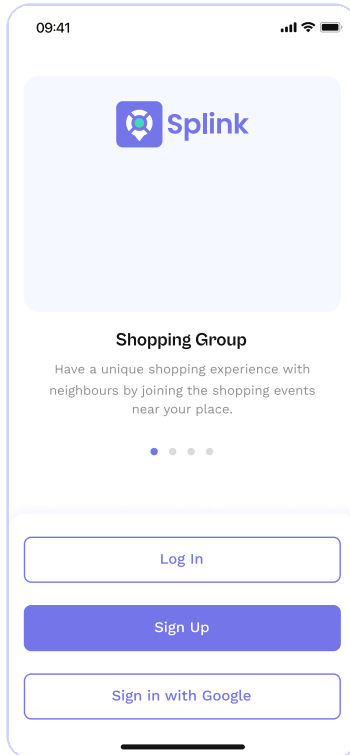


Snackbars

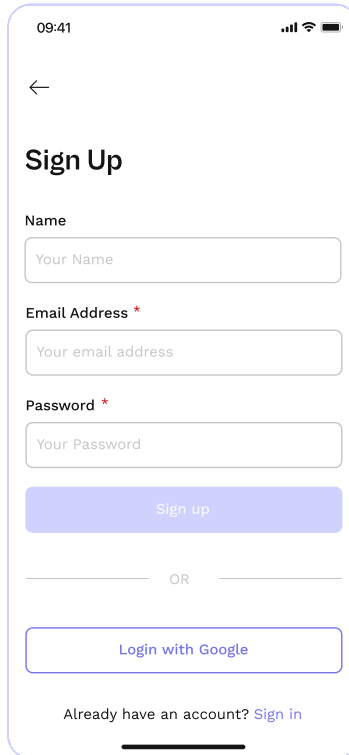


UI Mockups

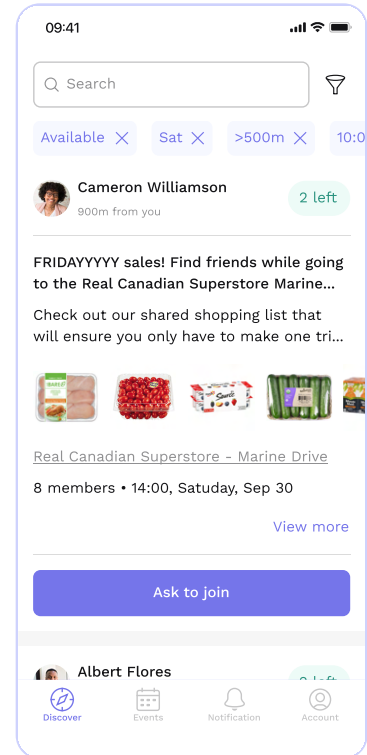
Onboarding



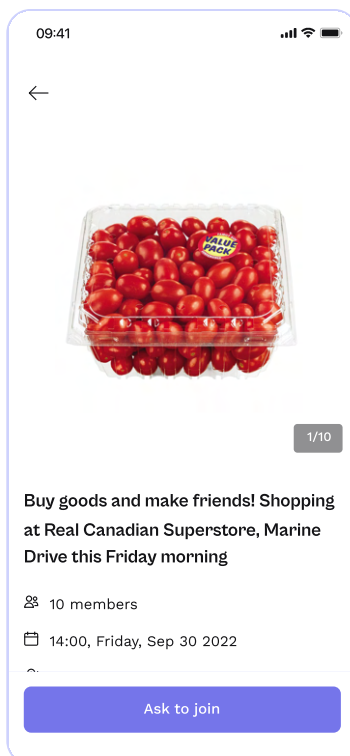
Sign up



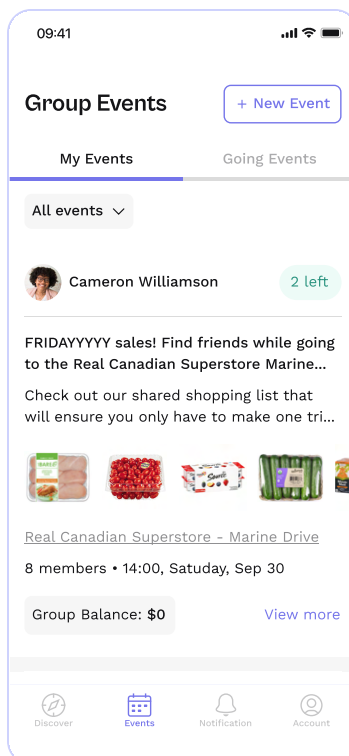
Discover nearby events



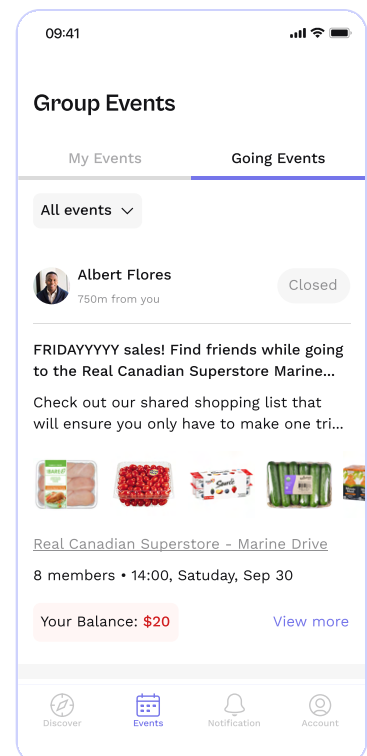
Event details



Group events (owner)



Group events (member)



Create an event

09:41

← Create a new event

Search a store *

Wholesale Costco - Burnaby

Event title *

Costco, Richmond, 30 Sep, 14:00

Description

Shopping with 8 members. Total bill is \$246.78 including taxes.

Your location *

2769 East 47th Ave, Vancouver

Discard Create

Edit event

09:41

← Edit event

2769 East 47th Ave, Vancouver

Set a radius

250m

Date * Set a time *

30 Sep 14:30

Remind

Before 1 hour

Set the cut-off time *

You can set the end time to close the event and stop receiving requests

Before 1 hour

Number of member limitation *

Discard Create

Edit event - member list

09:41

← Edit event

Number of member limitation *

10 members

Group members (8/10) Contact

Cameron Williamson Host

Robert Fox

Kristin Watson

Jane Cooper asking to join

Courtney Henry asking to join

Ronald Richards asking to join

Annette Blaack

Discard Create

Edit event - shopping list

09:41

← Edit event

Shopping list (5) + Add item

Krown mandarin x3

Remove Edit

Price per unit \$ 8.50

Tax PST None \$ 1.00

3 buyers Hide

Cameron Williamson (Host) - 2 +

Ronald Richards

Robert Fox

Kristin Watson x1

Discard Create

Create/Edit event - Select a store

09:41

Select a store

Search

Wholesale Costco

Expo Blvd, Vancouver

Still Creek Dr, Burnaby

Brighton Ave, Burnaby

Bridgeport, Richmond

Brighton Ave, Burnaby

Real Canadian Superstore

Wholesale Club

Select

Products list from the store

09:41

Costco Wholesale - Richmond

Search by item

Bread \$7.99 Tax \$0.00 Remove

Krown mandarin \$8.50 Tax \$1.00 Remove

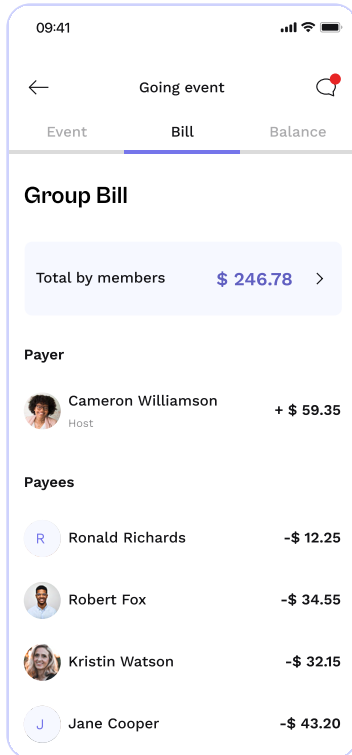
Yogurt Source \$12.00 Tax \$1.50 Add

Big cheese \$17.50 Tax \$2.75 Add

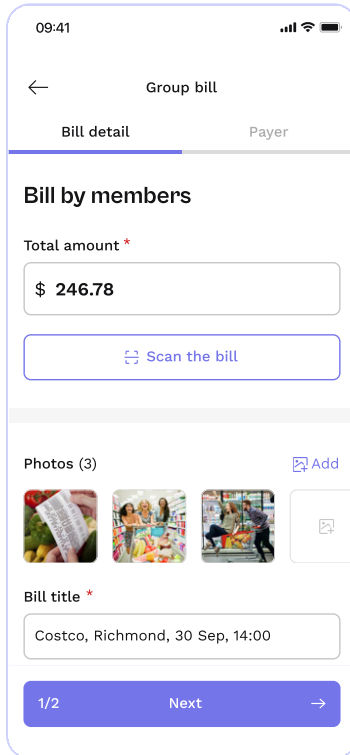
Bare chicken 25.25 Add

Krown mandarin has been added to shopping list Undo

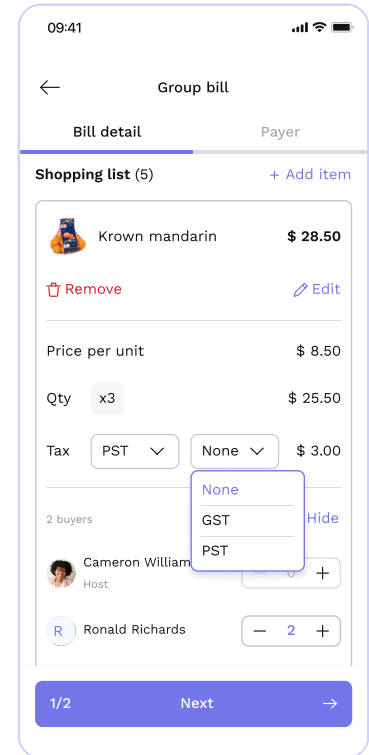
Group bill



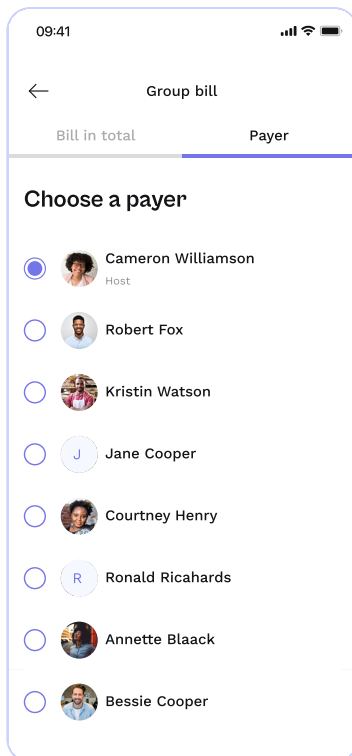
Group bill - Create



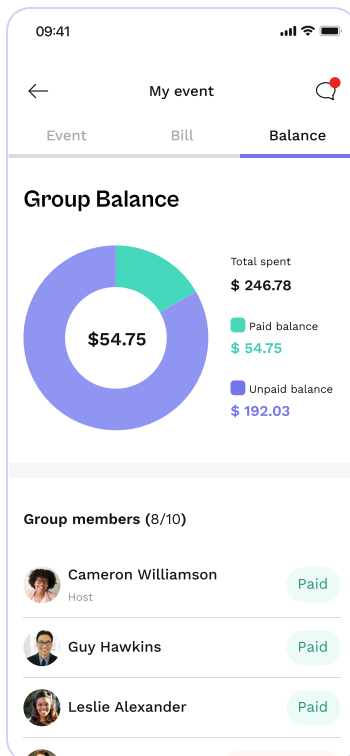
Group bill - Create (shopping list)



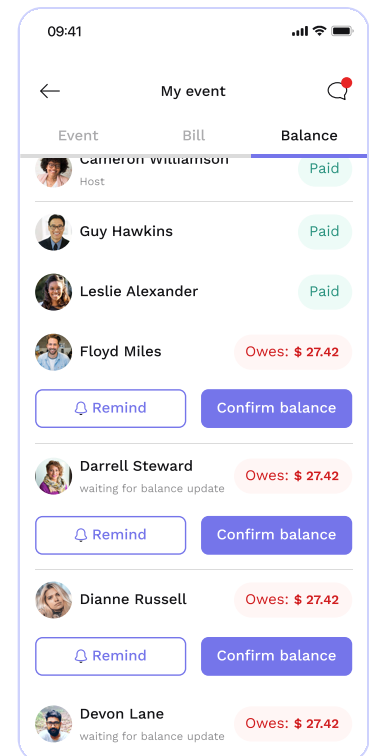
Group bill - Select a payer



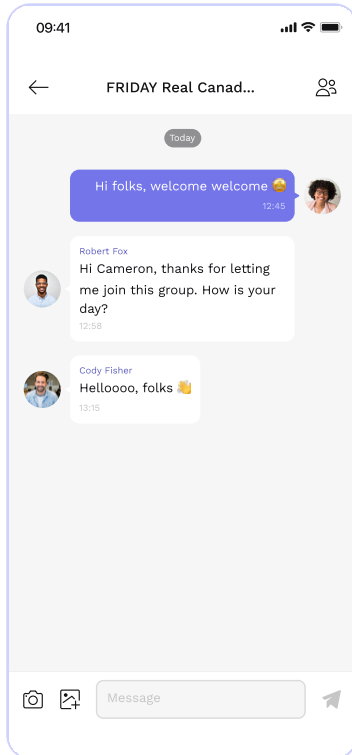
Group balance



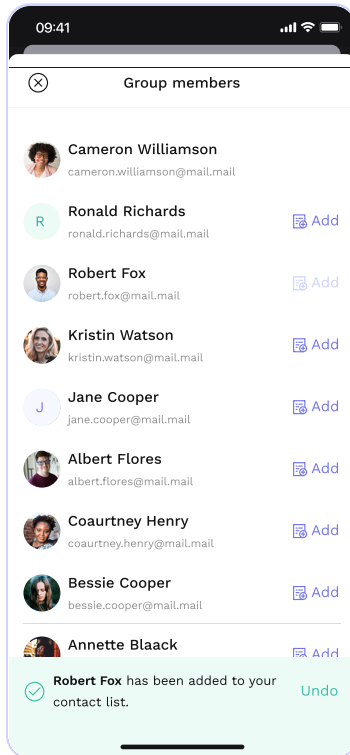
Group balance



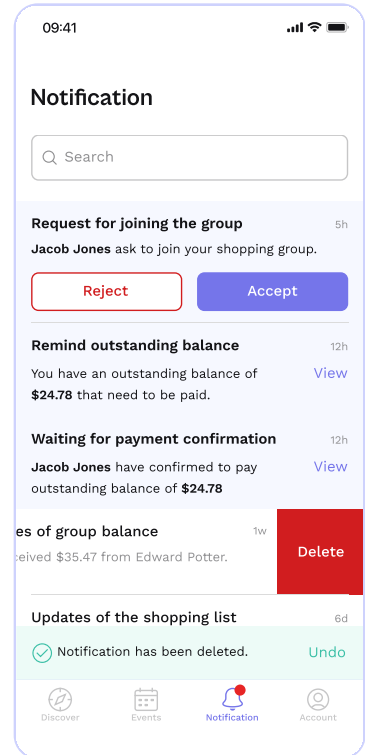
Group chat



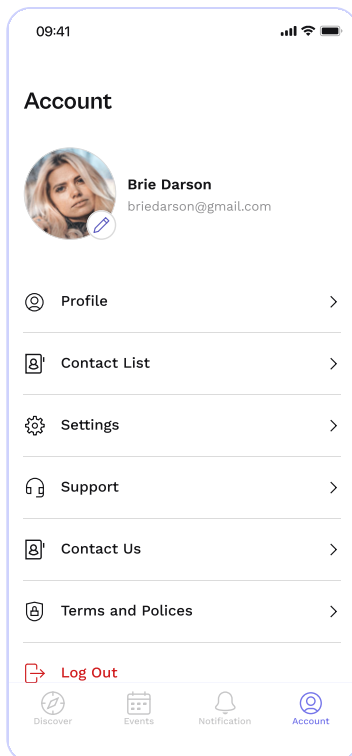
Group chat - add group members to contact list



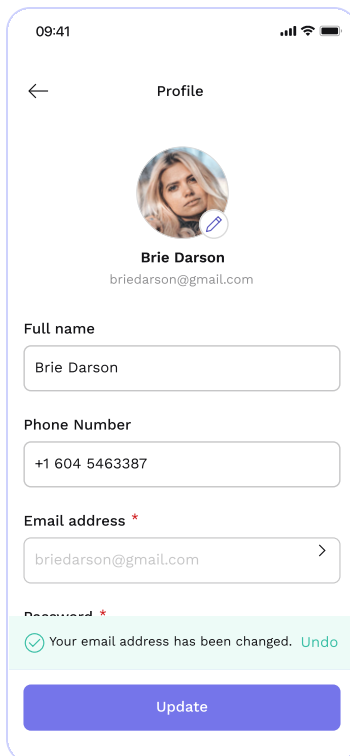
Notification



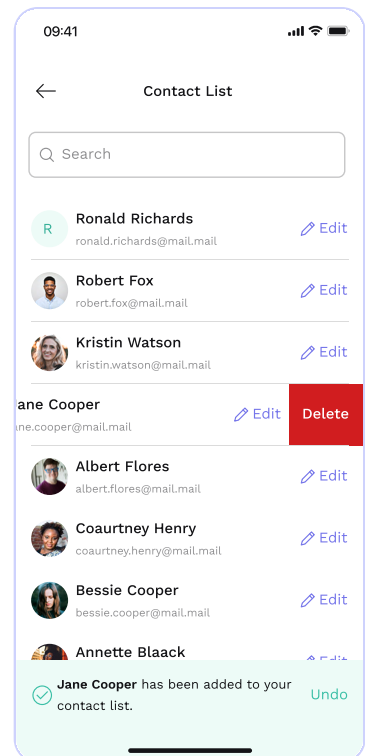
Account



User profile



Contact list



Technical Overview

Cloud Feature

Splink uses a cloud-based document database that stores every interaction that users do in the app. MongoDB Atlas is the platform of choice as it is scalable at very affordable options, and also has a quick read and write rate to API calls, making the information more accurate and real-time. Furthermore, the app data communication is end-to-end encrypted.

Platform

React Native is used to develop Splink. This Javascript framework performs well on both the popular mobile platforms iOS and Android. This enables the development of high-performance mobile applications while maintaining a standard codebase for UI/UX that is appealing and uniform across platforms. The backend of Splink is a Node.js/Express.js server. Modern, quick, and modular request formats are supported through the use of MongoDB and Rest API Endpoints. Services that are active on the server enable functions like scanning the bill and populating a list of shopped items.

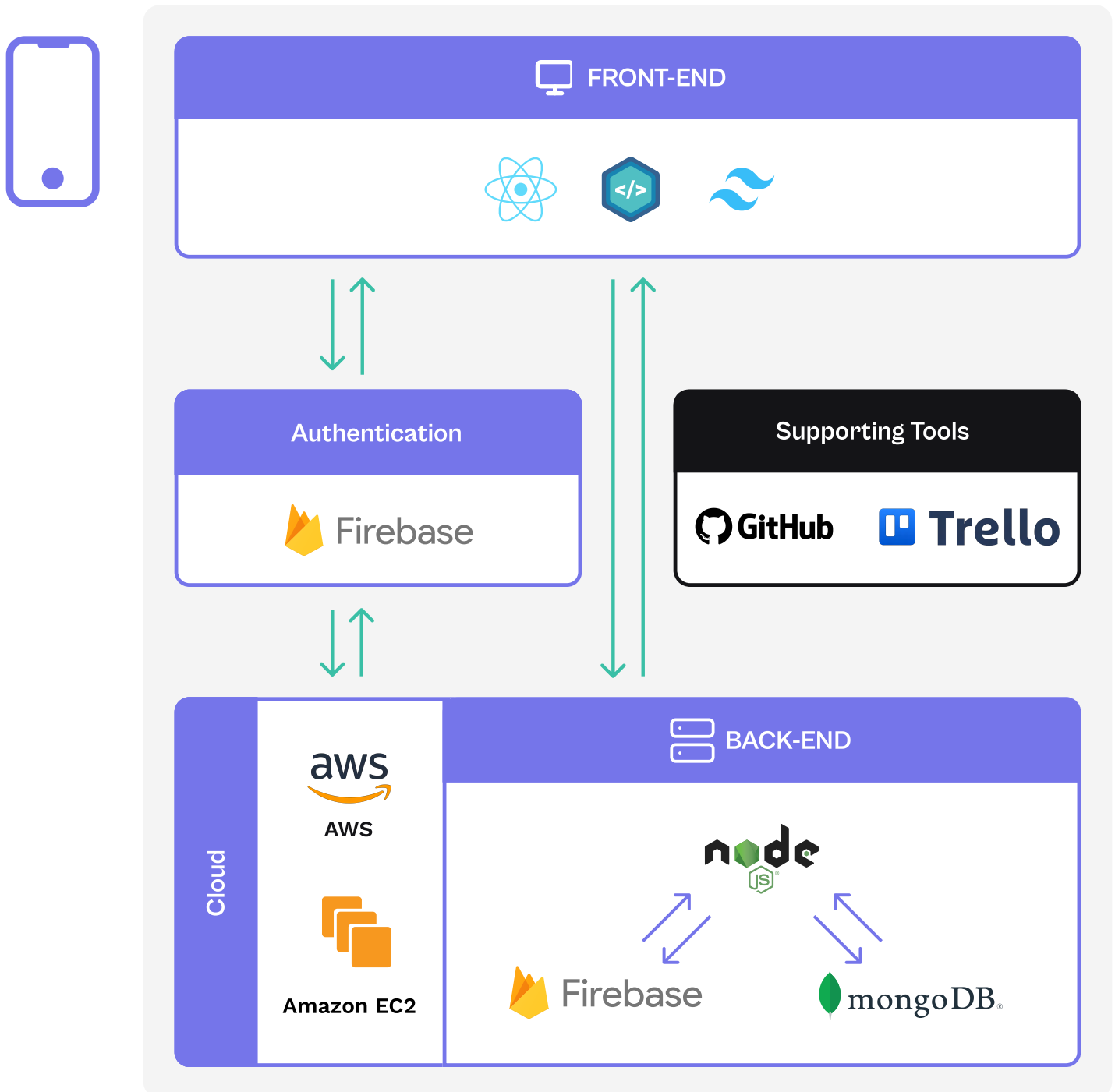
Security Feature

To use some services, like the ability to create and join shopping events in their area, users must register in. This encourages people to register for an account while assisting in the prevention of malicious conduct. Users are verified using Firebase Authentication, and Firebase stores all user emails and passwords. Sensitive user information is protected by MongoDB's policy of never storing user emails or passwords in the user profile. Users can also choose to log in using their Google accounts, giving them one-click access to the app without compromising the security of their personal information. To secure access to important API routes, Splink uses Firebase Admin on our server to validate logged-in user tokens.

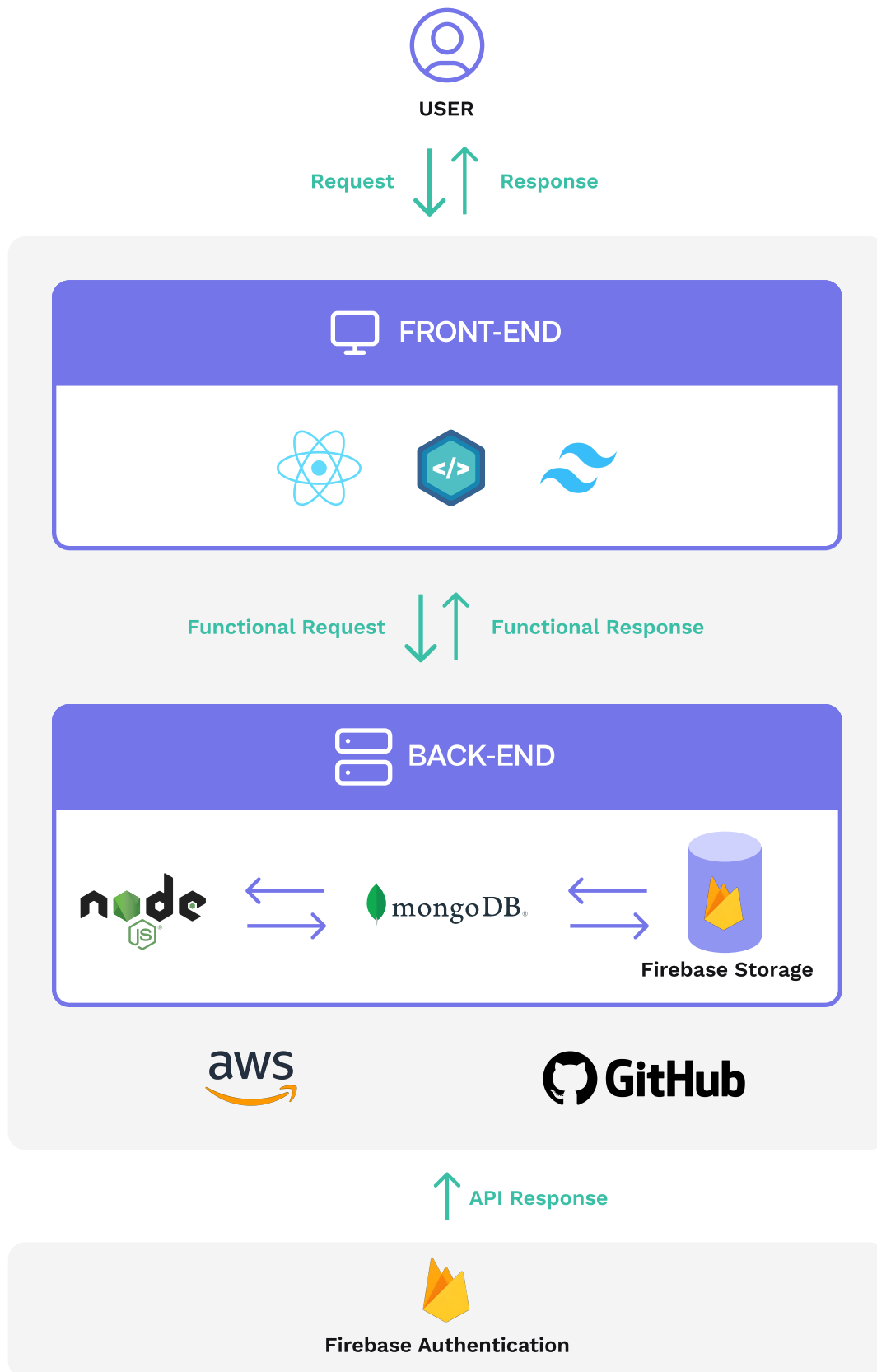
Our MongoDB server now has a middleware function that conditionally validates user tokens and offers user context before enabling or disabling access to user data updates and additions based on token validity.

Tech Stack

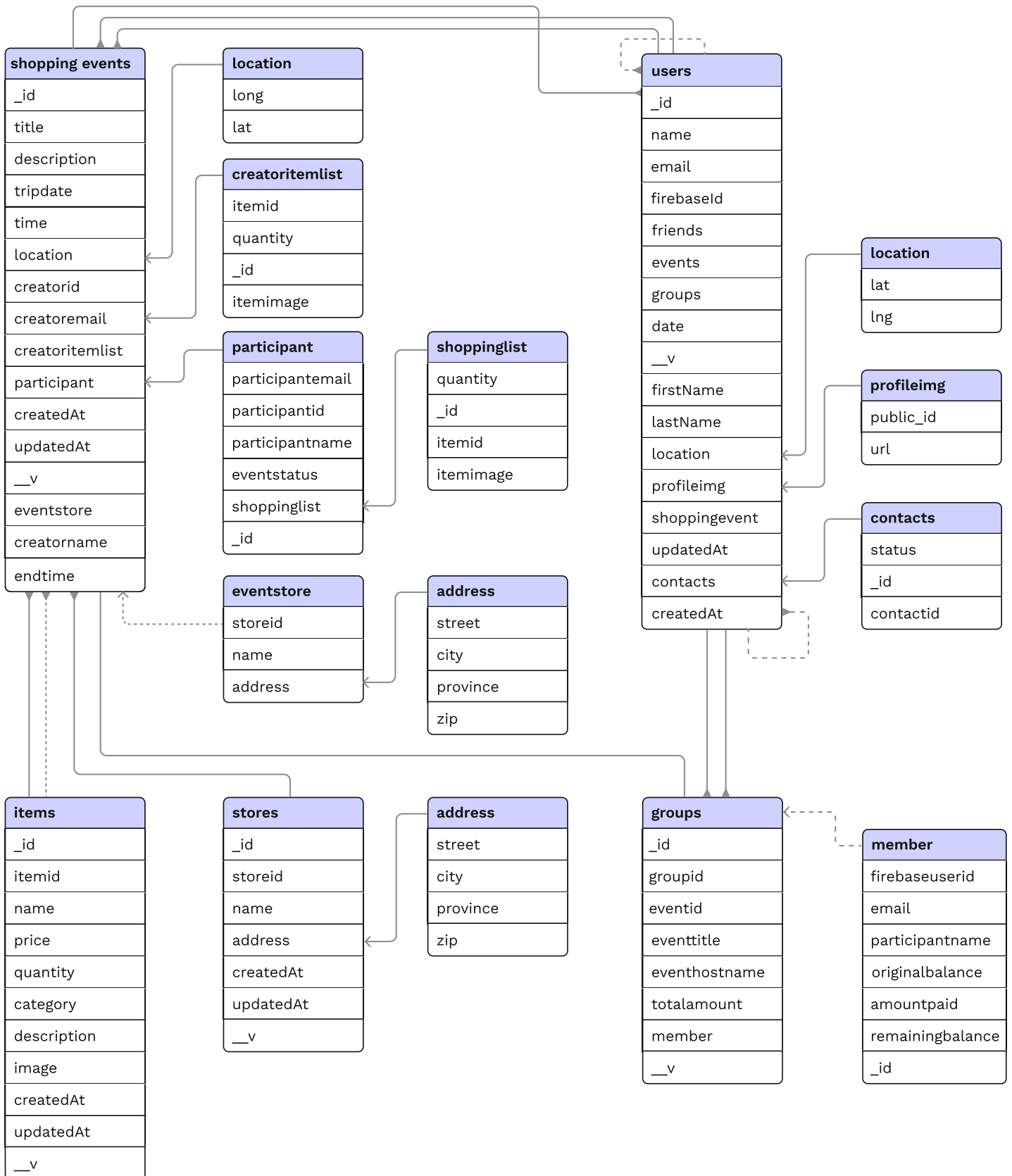
The front end of the mobile app is built using React Native. Components from Native Base and Tailwind CSS are also used to apply the style. The backend makes use of NodeJS. Firebase is being used for authentication. The backend is hosted using AWS EC2. Our developers used Git and GitHub for version control and the team used Trello for better collaboration and project management.



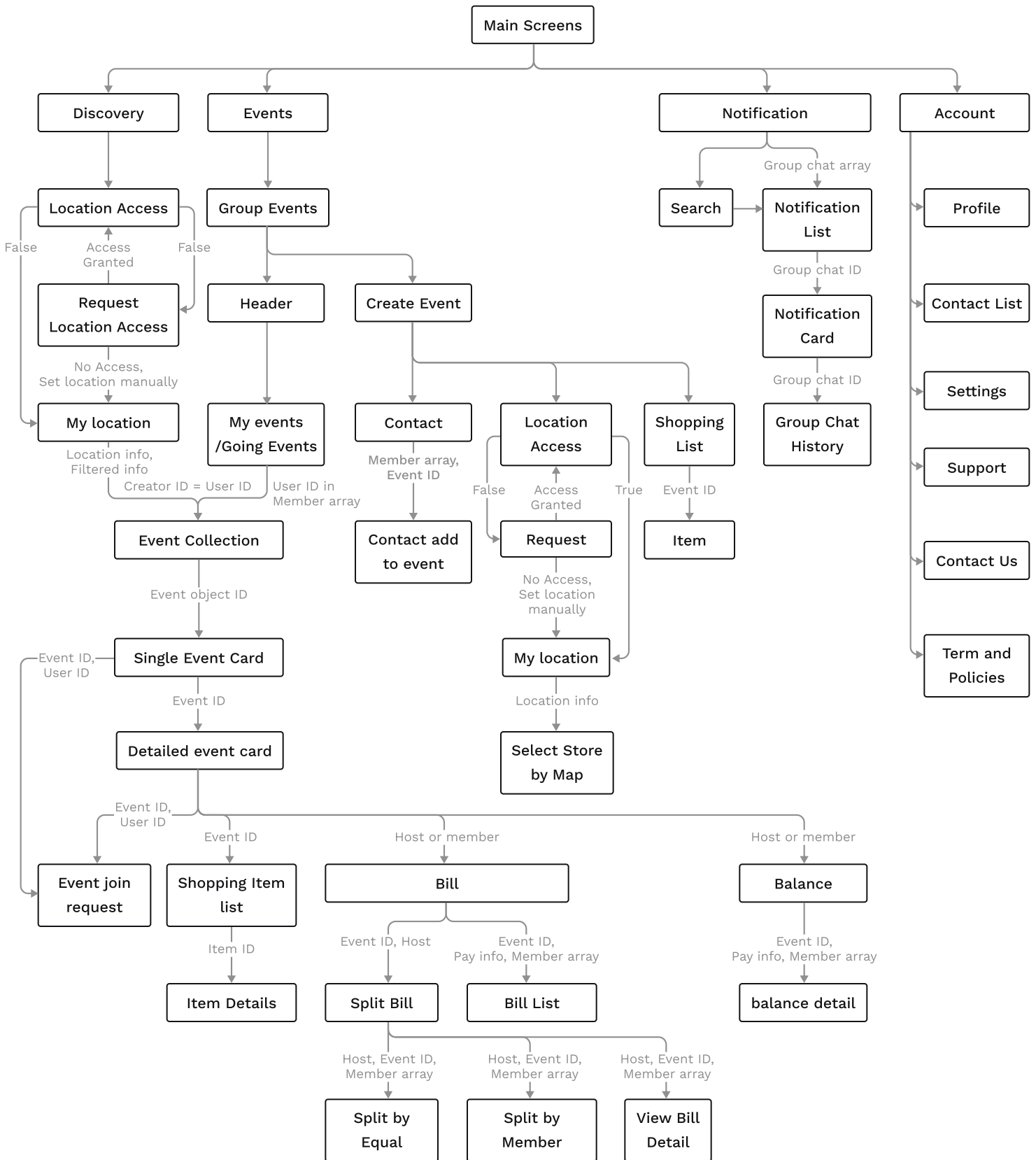
System Architecture



Database Model



Component Tree



Technologies Used

Project Management Tools

Trello helped our team to manage agile projects, Slack was used for communication, Miro and Lucidchart for idea visualization, brainstorming, strategizing and planning.



Slack



Trello



Miro



Lucidchart

Design Tools

Figma has been our main tool for collaborative work on UX/UI deliverables. Illustrator was used for the app illustrations. InDesign, PremierPro, and AfterEffects for the promotional materials.



Figma



InDesign



Illustrator



Photoshop



Premiere Pro



After Effects

Development Tools

Splink has been developed using MERN stack: React-Native for the front end, Node.js, and Express.js for the server side. To design the UI, we have implemented Native Base with styling done using Tailwind CSS. For the database and authentication, MongoDB and Firebase have been used respectively.



Tailwind CSS



React Native



Git Hub



Native Base



Firebase

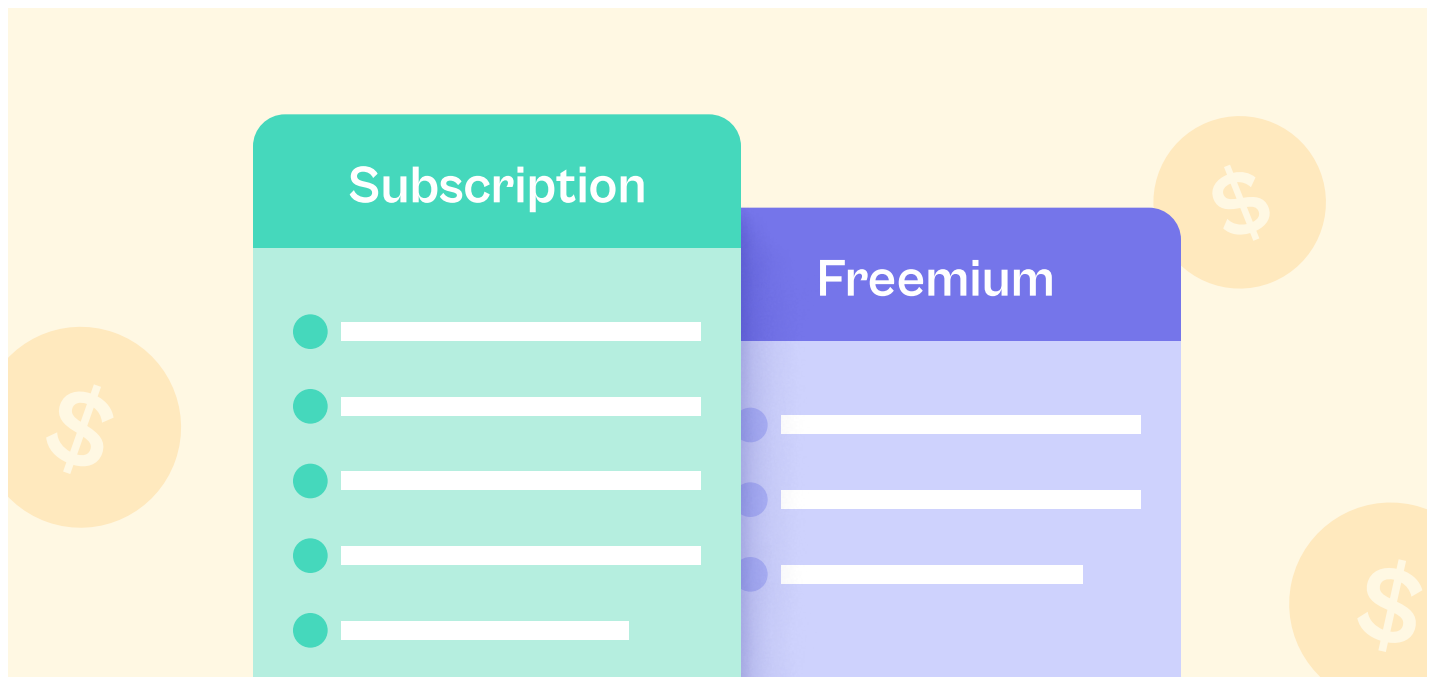


Mongo DB



Node JS

Monetization Strategy



After careful study we decided to implement in our app the following monetization strategies:

Subscription

The current version of the application is basic and free of charge. However, we are planning additional features in the future, such as a digital wallet, allowing users to make financial transactions within the app, and a budgeting feature for setting financial goals and tracking individual and group budgets. Advanced features, as well as the ability to control the amount and content of advertisements, would be available to the users of our Pro version. They can choose between weekly, monthly and annual auto-renewable subscription plan with free cancelation at any time.

Advertising

We can earn money by allowing relevant and trusted advertisers to place their ads on our mobile platform or sell advertising space directly to media buyers, without connecting to third parties.

The Team



KaranPal Singh • Project Manager, Lead Developer

A full stack developer by choice rather than need. I have previous expertise leading Project and Program Transitions. I am a results-oriented individual who places a strong emphasis on cutting waste and enabling agile services.



github.com/Karan-p-singh



[/karan-p-singh](https://www.linkedin.com/in/karan-p-singh)



Phat Nguyen • Lead UI/UX Designer

Graduated with a Bachelor's Degree in Banking and Finance, and a Certificate Degree in graphic design. Awarded “Best graphic design portfolio” at DPI Center, Vietnam, 2017. Worked as Graphic Designer and Product (UI/UX) Designer with 5 years of experience. Responsibilities for design direction and leading all design deliverables on the project: UX, UI, branding, marketing assets and presentation.



williamnguyen.work



[/williamphatnguyen](https://www.linkedin.com/in/williamphatnguyen)



Valentina Abanina • UI/UX Designer

Graduated with a Master's Degree in Fine Arts. Worked as a Quality Control Manager and Photographer Supervisor. Responsibilities on the project: performing market and competitors analysis, conducting UX research, creating personas and user flow. Work on wireframes, mockups, branding, marketing materials, and the proposal. Photo shooting.



vabanina.com



[/valentina-abanina](https://www.linkedin.com/in/valentina-abanina)



Shijie You • UI/UX Designer

Aim for designing simple, elegant solutions and creating inclusive interfaces for users. I have a background in journalism and mass media, and I've worked as a news reporter and multimedia designer for years. In this project I am responsible for all designer deliverables: UX, UI, video/animation, marketing assets, and presentation materials.



shijie.im



[/shijie-you](https://www.linkedin.com/in/shijie-you)



Hyewon Kang • Front-end Developer

Experienced as a Computer System Manager for 3 years, and got inspired by the position, I admire working as a programmer. In this project, I'm responsible for creating features for shopping events and the camera function in the frontend aspects.

 github.com/tecla1004

 [/hyewon-kang](https://www.linkedin.com/in/hyewon-kang)



Thushara • Full-Stack Developer

Graduated with a Bachelor of Technology in Computer Science. Worked as a Marketing Coordinator for an IT firm. No previous work experience as a developer but created web applications as part of the curriculum. I will be responsible for developing some features in this project as per team requirements. I will focus on both the front-end and back-end.

 github.com/tsuresh00

 [/thushara-suresh](https://www.linkedin.com/in/thushara-suresh)



Taras Ivanov • Full-Stack Developer

Graduated with a Master's Degree in International Business. Worked as a Transportation Manager. For this project will be responsible for some project modules (front-end and back-end).

 github.com/TarasKing

 [/taras-ivanov](https://www.linkedin.com/in/taras-ivanov)



Jaskaranvir Deogan • Full-Stack Developer

A Full-Stack stack Node.js Developer having experience in developing responsive layouts of web applications. I am looking to enhance my existing skills and gain new ones by performing my best in challenging roles in the Tech industry.

 github.com/jaskarandeogan

 [/jaskaranvir-deogan](https://www.linkedin.com/in/jaskaranvir-deogan)

References

Content

Government of Canada, S.C. (2022) Retail and wholesale statistics, Government of Canada, Statistics Canada. Retrieved October 25, 2022

http://www.statcan.gc.ca/en/subjects-start/retail_and_wholesale

Laird, K. (2021, October 12). Costco the grocer of choice for Canadian newcomers: study. Canadian Grocer. Retrieved September 15, 2022

<https://canadiangrocer.com/costco-grocer-choice-canadian-newcomers-study>

Canadavisa.org (January 24th, 2022) - Newcomer's Budget Guide to Canada

<https://canadianvisa.org/plan-your-move/newcomers-budget-guide-to-canada>

LaVonne Roberts (July 26, 2022). How families can waste less food. The Washington Post.

<https://www.washingtonpost.com/parenting/2022/07/26/family-food-waste-climate/>

Mark C. Perna (Sep 13, 2022). Why Financial Literacy Isn't Gen Z's Sweet Spot—Yet. Forbes.

<https://www.forbes.com/sites/markcperna/2022/09/13/why-financial-literacy-isnt-gen-zs-sweet-spot-yet/?sh=516a8af1627c>

beancount. (2020) (branch V2) [Computer Language]. Github.

<https://github.com/beancount/beancount>

Images

SnapwireSnaps (2015, January 14). Photo by SnapwireSnaps on pixabay. A Free Stock Photography. Retrieved October 15, 2022,

https://pixabay.com/users/snapwiresnaps-692569/?utm_source=link-attribution&utm_medium=referral&utm_campaign=image&utm_content=597173

Reachsky7 (2021, January 23). Photo by Reachsky7 on pixabay. A Free Stock Photography. Retrieved October 02, 2022

https://pixabay.com/users/reachsky7-16544962/?utm_source=link-attribution&utm_medium=referral&utm_campaign=image&utm_content=5928801

Gourmet, E. (2019, September 24). Photo by Estudio Gourmet on unsplash. Beautiful Free Images & Pictures. Retrieved October 25, 2022

https://unsplash.com/photos/wJbDzUQoFBQ?utm_source=unsplash&utm_medium=referral&utm_content=creditShareLink

File:mongodb logo.svg. Wikimedia Commons. (n.d.). Retrieved October 31, 2022

<https://commons.wikimedia.org/w/index.php?curid=79967668>

