

Usability Testing Review

GroupShop: Grant Azure, Antonio Diaz, Peter Hu, Eric Le

Plan for Usability Tests

Target Participants:

College students/young professionals in shared housing

Goals:

- See how the user adds items to the grocery list and compare that to our perceived correct process.
- See how the user makes a payment/requests reimbursement and compare that to our perceived correct process.
- Ensure our design flows and makes sense to our target users.
- Make sure the wording we choose conveys the functionality appropriately.
- Debrief/facilitate discussion after the test to explore additional functionality or comments expressed by the candidate.

Test Protocol:

1. Introduced team to participant
2. Stated intro script explaining the test was about our design and not about the participant.
3. Gave the participant two tasks:
 - a. Add Ramen Noodle Soup to my items
 - b. Enter receipts and manage reimbursement after grocery trip
4. Thanked participant for taking our usability
5. Reviewed usability errors

NOTE: We used flaps and stickies to improve the flow of our prototype actions.

Usability Test 1 Results

Participant:

Amy lives with 2 other people and showed interest in exploring new grocery shopping options.

Environment:

We conducted our usability test in the first floor of the Engineering Library. The participant was going to be studying here so we wanted to make it convenient for her.

Roles:

Facilitator: Grant

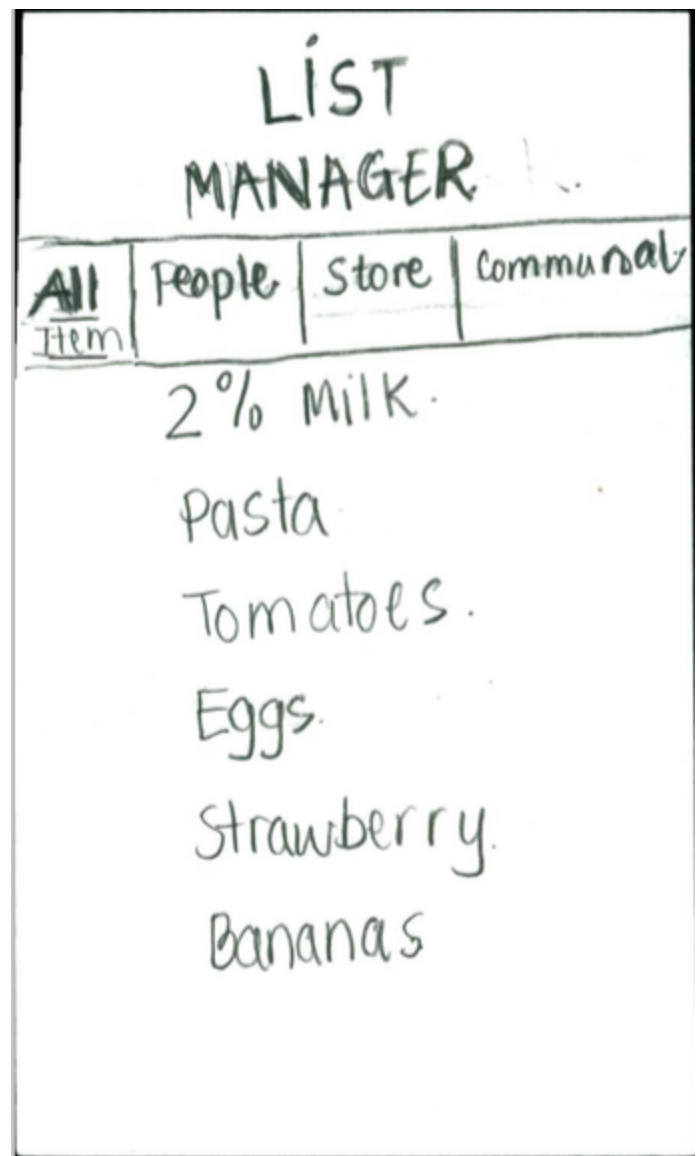
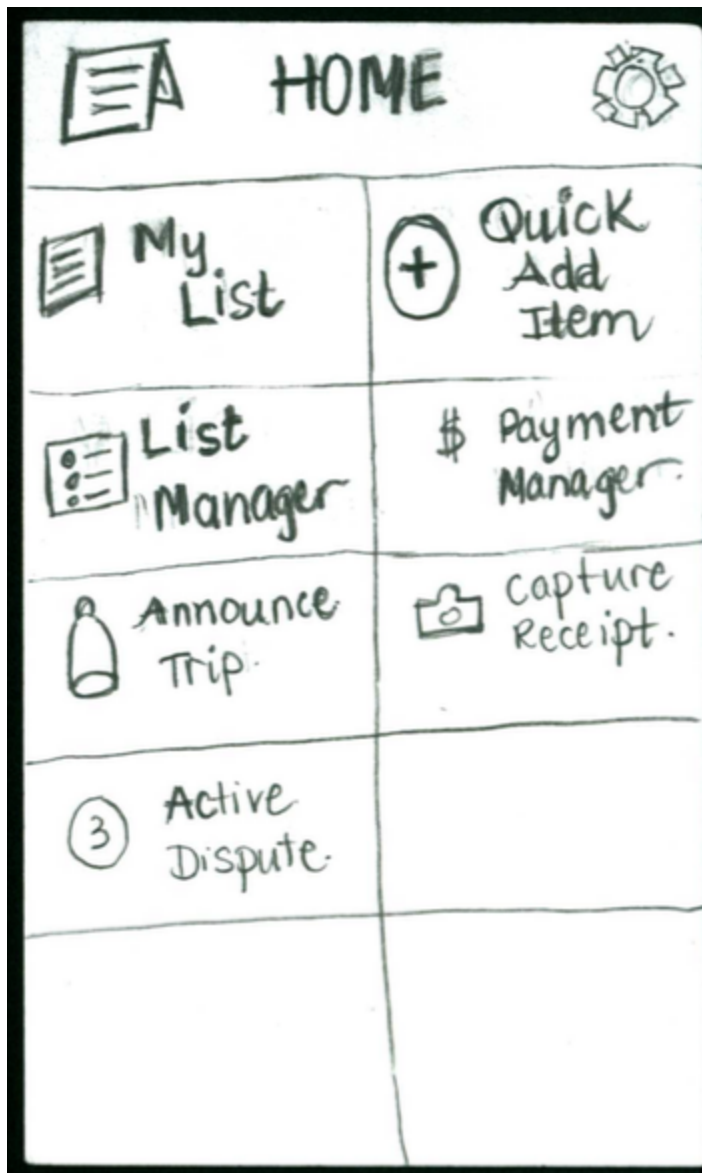
Computer: Eric

Note Taker/Observer: Antonio

Usability Error Tracker: Peter

Issue 1: Single master list does not offer enough flexibility

Candidate was disappointed with the flexibility of the master list. They identified this as a problem when they wanted to add items to lists specific to store. Currently, the inability to narrow the list gives item and information overload to the shopper. We classified this issue with a severity of 3 (major usability problem), since the candidate was inhibited from accomplishing the task of building a list. As a result, we introduced an intermediate screen with ability to organize multiple lists (List Manager). Introducing lists organized by people, store, personal/communal solves the flexibility issue and helps shoppers accomplish the task of building a list. We also added 'My List' button, where the shopper can quickly navigate to their own personal shopping list



Revised prototype

Issue 2: Takes too long to get to “Add Item.”

Adding an item to the shopping list is a common task. There is too much friction to get to the add item step. The shopper has the option to add to a variety of different lists. Oftentimes, they only need to add to a their list with high frequency. We classified this issue with a severity of 2 (minor usability problem), since the candidate could accomplish the task of building a shopping list (just with less efficiency). As a result, we introduced a “Quick Add Item” button from the home screen to expedite the process.

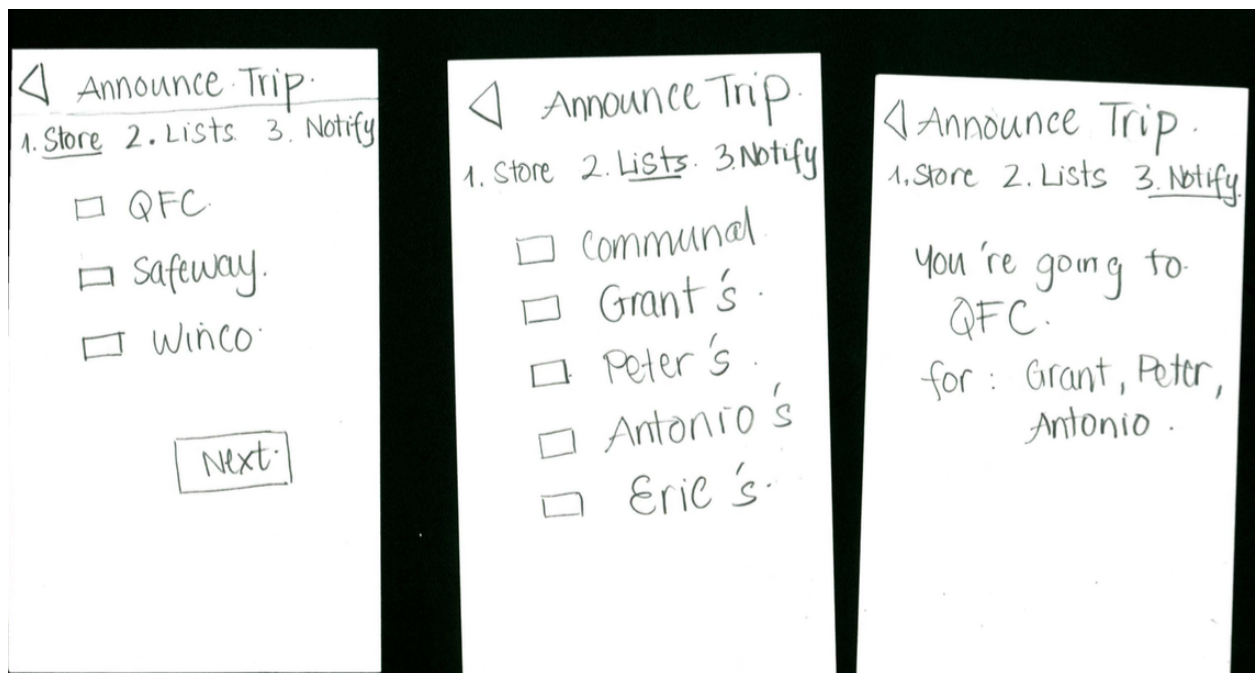
A hand-drawn prototype of a mobile app screen titled "ADD AN ITEM". At the top left is a back arrow icon. Below the title is a text input field labeled "Item's name". Underneath is a section with two tabs: "Personal" and "Communal". Below the tabs is a "STORE" label with a dropdown arrow. This is followed by another text input field labeled "ADDITIONAL NOTE". At the bottom is a large "ADD" button.

A hand-drawn prototype of a mobile app screen titled "HOME". At the top left is a menu icon (three horizontal lines), and at the top right is a gear icon for settings. Below the title bar, there are two main buttons: "My List" with a list icon on the left, and "Quick Add Item" with a plus sign in a circle icon on the right.

Revised Prototype

Issue 3: After finishing a shopping trip, don't know whether to click end shopping or capture receipts.

The candidate was confused what would happen if they did not click 'End Trip'. They wanted to just hit 'Capture Receipt' and end the trip that way. This left the application in shopping mode indefinitely. We classified this issue with a severity of 3 (major usability problem), since the candidate could not effectively accomplish the task of reimbursement. As a result, we made changes so we no longer need the shopper to complete the full circle of shopping: going shopping and ending shopping. Instead, when a shopper initiates a trip, they click a new button 'Announce Trip' to notify housemates of a new shopping trip. This way, multiple trips can be initiated before receipts are captured and the application will not fail functionality.



Usability Test 2 Results

Participant:

Jane lives with 3 other people and showed interest in exploring new grocery shopping options.

Environment:

In the HUB. We wanted to make it convenient for her to help our usability test.

Roles:

Facilitator: Grant

Computer: Peter

Note Taker/Observer: Antonio

Usability Error Tracker: Eric

Issue 1: Labels confusing

The term “label” immediately spawned confusion with the test participant, she decided to disregard it during the test and we went ahead with the test. During the debrief, we talked with her about maybe changing the language to “billing category” or something similar and that didn’t resonate with her either. We classified this issue with a severity of 2 (minor usability problem), since the candidate could accomplish the task of building a shopping list (just with less efficiency). Our revision to this was to dumb down the billing labels simply to personal or communal. For all billing purposes, this still gives enough information to divide billing costs and is generally easier to understand.

Left Prototype (EDIT ITEM):

- Title: EDIT ITEM
- Input: Item's name.
- Selection: Personal | Communal.
- Action: STORE ▾
- Note: ADDITIONAL NOTE
- Final: FINISH

Right Prototype (ADD AN ITEM):

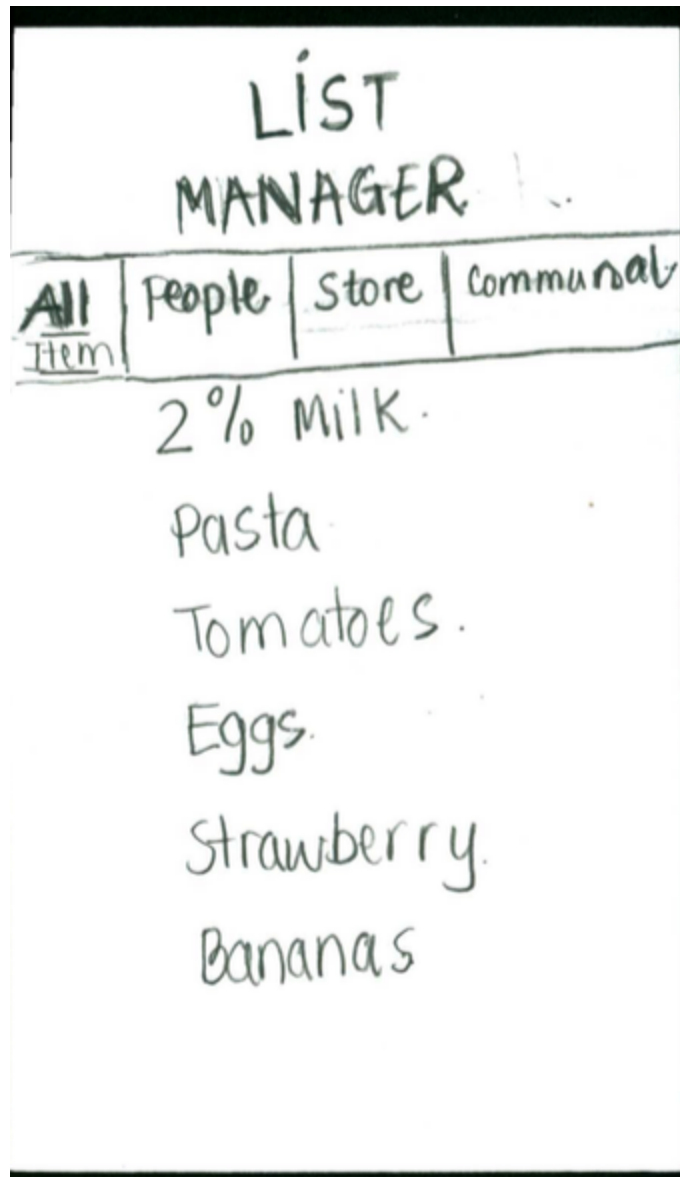
- Title: ADD AN ITEM
- Input: Item's name.
- Selection: Personal | Communal.
- Action: STORE ▾
- Note: ADDITIONAL NOTE
- Final: ADD

Revised Prototype

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Issue 2: Lack of master view

In getting rid of the master list after the first usability test, we forgot to keep a general overview of all of the items. This came up during the user test when she wanted to see every item her roommates had posted. We classified this issue with a severity of 2 (minor usability problem), since the candidate could accomplish the task of building a shopping list (just with less efficiency). Our revision was to include an "All Items" view in the list manager.



Revised Prototype

Usability Test 3 Results

Participant:

Luis lives with 3 other people and showed interest in exploring new grocery shopping options.

Environment:

Luis' Apartment. We wanted to make it convenient for him to help our usability test.

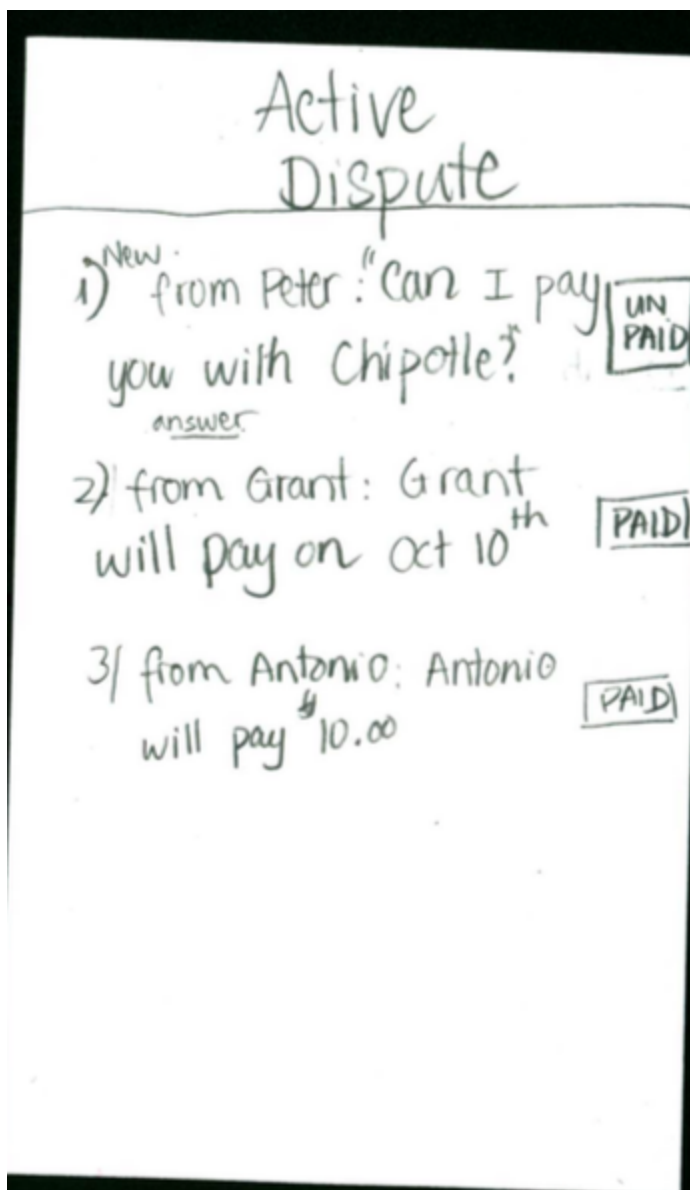
Roles:

Facilitator: Antonio

Computer: Eric

Note Taker/Observer: Grant

Usability Error Tracker: Peter



Issue 1: Messaging/Communication

The participant had concerns with the notifications system. He asked, "Will the app notify me if the roommates have received the message and viewed it (of me going shopping)? Similar to WhatsApp?" He also had concerns about the "Question" functionality to dispute charges with people. He felt that the system was open-ended and did not make it seem urgent enough to handle a conflict. We classified this issue with a severity of 3 (major usability problem), since the candidate could not effectively accomplish the task of reimbursement. Our revision to this problem is to add read receipts to notifications. This provides valuable information to the person who needs reimbursement. We also added an Active Dispute Center. To create urgency, active disputes are visible on the home screen and no new disputes can be created between two people until the previous one has been resolved. We will provide a list of suggested prompts such as "Can I pay you with Chipotle instead?" and "I think my charge is too much" to keep messages somewhat directed.

Final Prototype

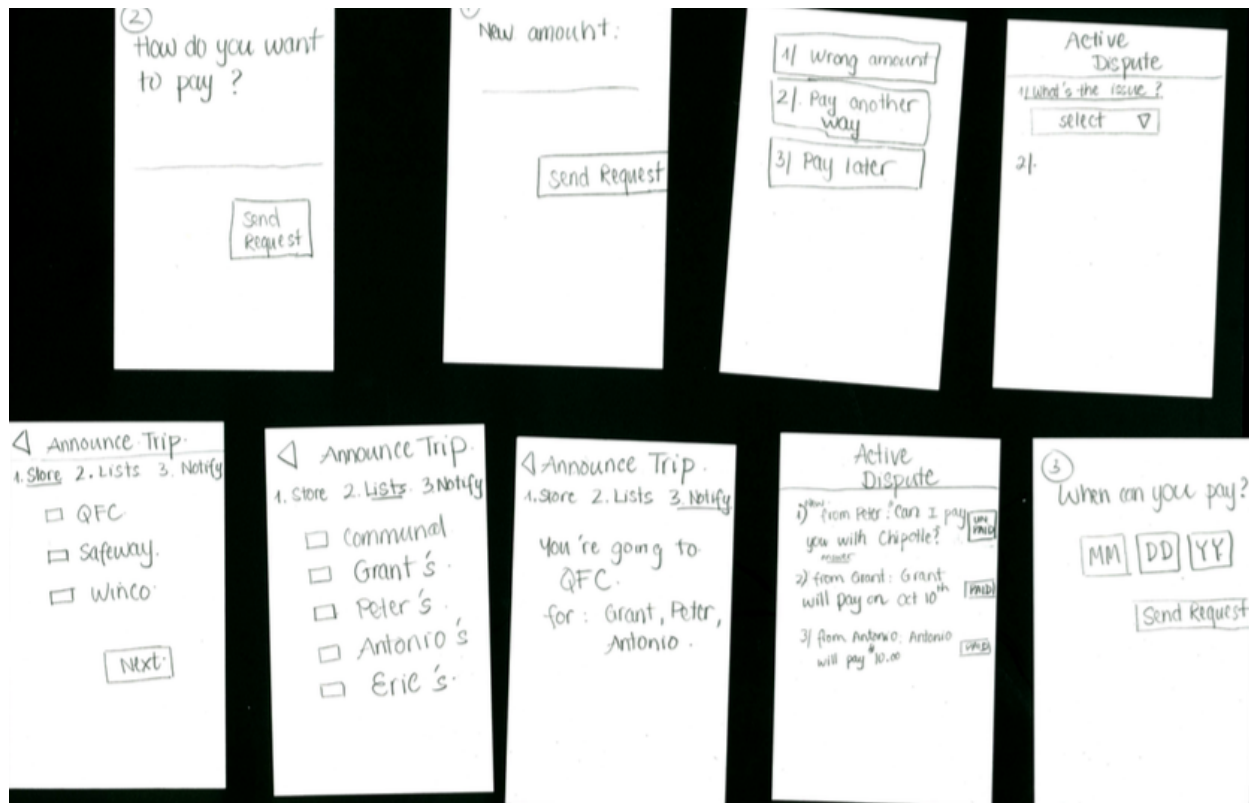
Important Modifications

An important modification we found in usability testing was messaging roommates when going shopping and for disputing charges. We classified this problem with a severity of 3 (major usability problem), because it did not allow users to successfully resolve payment disputes. This has been difficult for us to work with because it was difficult to narrow our focus from general messaging to limiting to a “ticketing” system. We needed to make this easier for users to understand how to use and so a dispute must be resolved before another could be started.

Another important modification has to do with our labels terminology. We classified this issue with a severity of 2 (minor usability problem). However, all of our usability testing sessions seemed to unearth concerns with the terminology. Concerns about the terminology quickly evolved over concerns about the function of said terminology, leading into a spiral of confusion that was no fun for anyone during the user test. Our revision to this was to dilute the billing labels simply to personal or communal. For all billing purposes, this still gives enough information to divide billing costs and is generally easier to understand.

Overview 1





Overview 2

Task 1: View My List and Quick Add an Item

From home screen, select 'My List' to view personal list. Notice item is categorized as C (communal) and P (personal). Quickly add an item by clicking on the + button on the My List menu or clicking on 'Quick Add Item' in home screen.



◀ EDIT ITEM

Item's name.

Personal Communal

STORE ▾

ADDITIONAL NOTE

FINISH

User also have option to edit any item:

Task 2: View All Item in List Manager/ People in the List / The Store and list of communal item

LIST
MANAGER

All Item	People	Store	Communal
2% Milk.			
Pasta			
Tomatoes.			
Eggs.			
Strawberry.			
Bananas			

LIST
MANAGER

People	Store	Communal
[P] Peter ▾		
[G] Grant ▾		
[A] Antonio ▾		
[E] Eric. ▾		

LIST
MANAGER

Store	Communal
QFC ▾	
Safeway ▾	
WinCo ▾	

LIST MANAGER.

All Item.	People	Store	<u>Communal</u>
Milk Tomatoes. Eggs.			

Task 3: Announcing trip and notify roommate about the shopping trip. First select which store to go shopping, then select whose items will appear in the shopping list and finally sending notification to other roommate

◀ Announce Trip.

1. Store 2. Lists 3. Notify

- ☐ QFC.
- ☐ Safeway.
- ☐ Winco.

Next.

◀ Announce Trip.

1. Store 2. Lists 3. Notify

- ☐ Communal.
- ☐ Grant's.
- ☐ Peter's.
- ☐ Antonio's.
- ☐ Eric's.

◀ Announce Trip.

1. Store 2. Lists 3. Notify

You're going to
QFC.

for : Grant, Peter,
Antonio.

4/Opening dispute to Antonio about \$15, select in dropdown menu "what is the issue", choose "Pay Later", specify the date that payment should be received and hit "send request"

