

# BARTR

## ITS NEVER BEEN SO EASY

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# Problem Statement

## Students Need



Cloths



Furniture



Books

College students will on average spend between \$1,298-\$1,364 on books while in school and in access of \$8,000 on room and board(Average Estimated Undergraduate 2016). In addition to all the requirements for school students will still need cloths, supplies, and furniture when starting college, which can leave them living pay check to paycheck to pay their bills. Selling books and other supplies on Craigslist is one way for a college student to make a little extra cash but giving away your phone number or email to strangers can be a hassle or even dangerous. Contact information added to a post can result in spam email by the other party (Maberry 2014). Buyers will also find exactly what they are looking for only to find out that the item has been sold months ago (Advantages and Drawbacks n.d.).

# Solution



**Block Messages**



**Map View**



**Social Media**

Anyone can sell and trade with users around them without the need to ship or electronic payments. With Bartr users will be able to contact each other with an in app chat so there's no need to put your email or phone number in the post for everyone to see. Users will also be able to block others from contacting them if needed and will no longer be contacted once they take down their post. Posts will automatically be removed in a week unless the user extends the post manually, so listings will be removed even if the user forgets to.

In addition to a great chat service Bartr has other great features to make buying selling and trading fun and easy. A map view will allow users to search for items in their local area or they can expand the radius of their search to the entire United States, since Bartr will focus on hand to hand exchange its will be up to the user to decide how far they are willing to travel to make a transaction. Once a User has created a post sharing to social media will be just one click away. Users will get a snapshot of their listing to announce it on Twitter, Facebook or Instagram.

# Target Audience

## Demographic Profile

Bartr will be aimed at college students and recent grads ages 18-25. These young adults will be working 30 hours a week at a low paying job making around \$15,000 a year (Norman n.d). Students who are living in a dorm or will be sharing an apartment with roommates.

## Audience Profile

Our initial target audience will be living in the United States and will be using an iPhone. 42% of all smartphones in the US are iPhones and Samsung is in second with only 28% (Goldman 2015). When looking at college students alone about 63% of college undergrads use cellphones as a way to connect to the internet(Smith ). Finally about 4.8 million iPhone users between the ages of 18-22 in the United States and that is a conservative estimate (Aaron n.d)

## Personas



Age - 20

Jaime is in her junior year in college she will soon be moving out of her dorm room into an apartment with her friends. She is working in a department store close to campus and would like to buy some new kitchen supplies by making some extra cash selling her old text books. Jaimie can use Bartr's map view and filters to find other students looking for college books in her area. She can search for college books and use the map filter of a 30 mile radius to see how far away the other users are to decide if she can travel that far. Bartr can easily help Jaimie sell all her un-wanted text books to get that dream apartment kitchen.



Age - 18

Alex will soon be moving into his dorm, and need furniture and supplies. During the summer Alex works in a fast food restaurant making minimum wage so he doesn't have much to spend and will be leaving his job when he starts school. Alex put a post on Craigslist to sell his old car, and now people are constantly contacting him with low ball offers and there is no way to stop the text messages. Once Alex sold the car people were still asking him about the car he had for sale. Using Bartr's Chat system is simple and Alex can block users from contacting him, and even though Alex forgot to take down his listing Bartr will automatically remove it after a week.

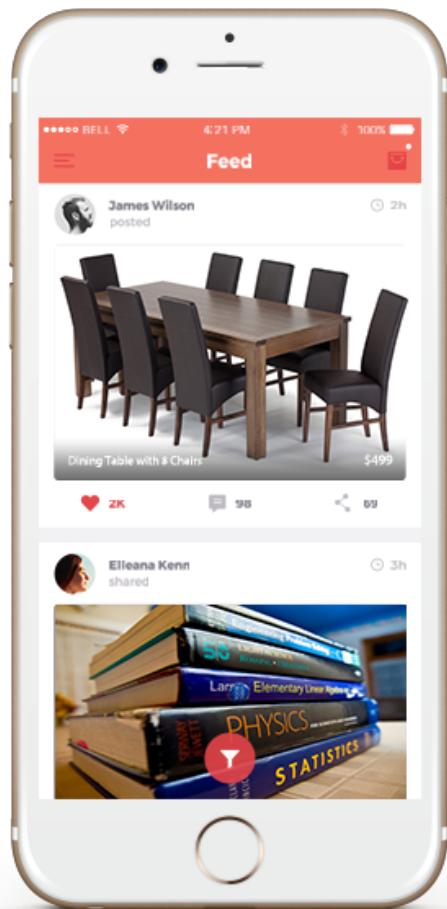


Age - 22

Alison is a recent grad who is working at an internship position at a software company. She is taking the bus to work now but would someday like to buy a her own car. She is paying off her student loans even month and doesn't want to add any additional monthly bills. Alison started looking online for cars and found the perfect one. She contacted the seller however many users who list items never take the postings down after selling them, so Alison was disappointed when he told her that the car was sold months ago. Bartr's automatic listing removal allows only recent and still active posts to appear. Alison can also create a post that explains exactly what car she is looking for.

# Target Platform

## iOS/iPhone



Initial development for Bartr will be aimed at the iPhone. Developing for Android is more expensive for various reasons one of the main being the amount of code needed to develop the same application. One project found that an iOS app will take 6,829 lines of code while the same Android app will take 15,323 lines of code. The amount of hours that goes into the work tells the same story with android taking on average 28% longer (Car 2015). Focusing on developing for iPhone initially will allow for a cleaner more polished final product, which will allow for a faster growth of users.

Android Fragmentation is also something that would slow down the initial launch of the application. There is a large variety of

Android phones out there and developing an app initially for both platforms will make it difficult to create an app to work on every device. If we target the last 3 iOS versions for our application Bartr can reach about 97% of active iOS users while doing the same on Android would reach only 67% (Simon, 2014). Finally there is more opportunity for revenue since iOS developers tend to make about 70% more off of their apps than Android developers(The App Solutions n.d)

# COMPETITIVE ANALYSIS

## iOS Competitors

### OfferUp

Rating - 4/5 stars

Free

OfferUp by iDeal Technologies is one of the largest second hand buying and selling apps out there. OfferUp launched its first website in October 2011 to build a user base later that year they released the iPhone app. After the release onto the App Store the company began to raise money while building the Android application that was realized 2 years later in October 2013. By September 2015 OfferUp reached 10 million overall app installs.

The image displays three screenshots of the OfferUp mobile application:

- Login Screen:** Shows the "OfferUp" logo at the top left, a "Cancel" button at the top right, and a large blue "Log in with Facebook" button. Below it are two smaller buttons: "Sign up" with a mail icon and "Log in" with a mail icon. At the bottom, there's a link "Need Help?" and terms of service/privacy policy information.
- Browsing Screen:** Shows the "OfferUp" logo at the top center, with "Browse" and "Invite" buttons on the sides. A search bar with a magnifying glass icon and a "Filter" button are at the top. Below is a grid of nine small item thumbnails, with a callout bubble in the bottom right corner saying "Offer up something!". The footer has icons for Home, Chat, Camera, Tags, and Profile.
- Product Listing Screen:** Shows a product listing for "Powerblock Adjustable Dumbbells". The image shows two black adjustable dumbbells. A green price tag in the foreground says "ASKING \$150". The listing includes the category "Beauty & Health", a timestamp "32 minutes ago", and a user profile for "Eric Harlander". At the bottom are "Ask" and "Make Offer" buttons.

# COMPETITIVE ANALYSIS CONTINUED

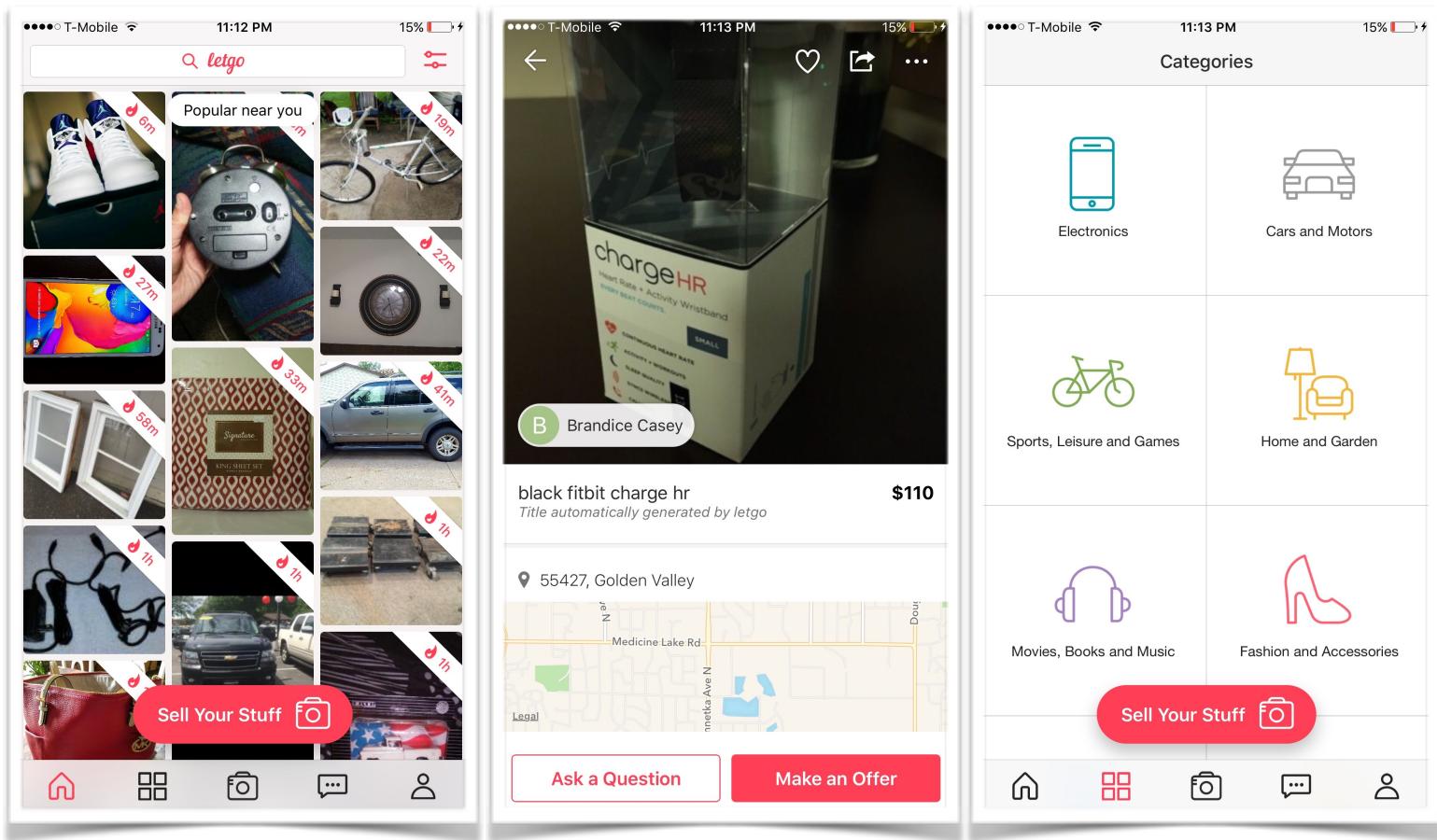
## iOS Competitors

### LetGo

Rating - 4.4/5 stars

Free

LetGo launched in the beginning of 2015 and by September of the same year it grew to a user base of over 2 million. It is rapidly becoming one of the main contenders against sites like Craigslist and apps like OfferUp. Letgo aims to bring a clean and free experience to its users and has raised \$100 million to do just that.



# COMPETITIVE ANALYSIS CONTINUED

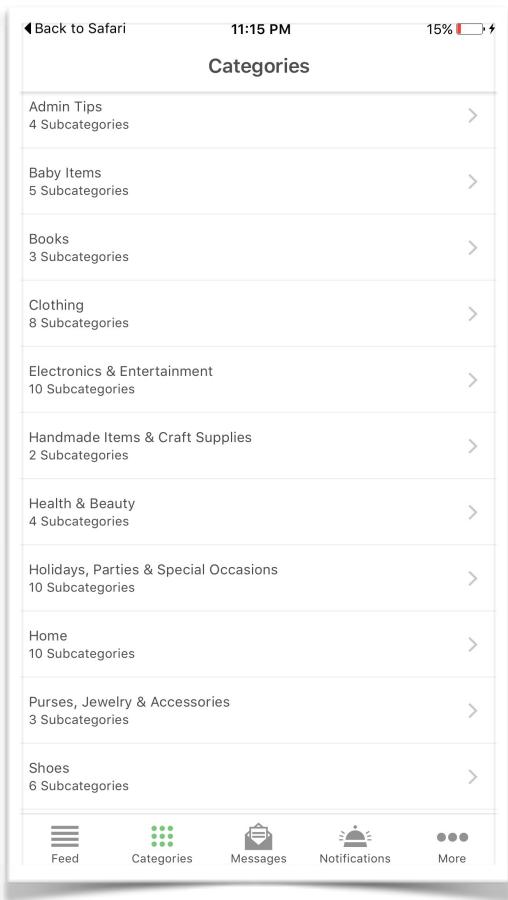
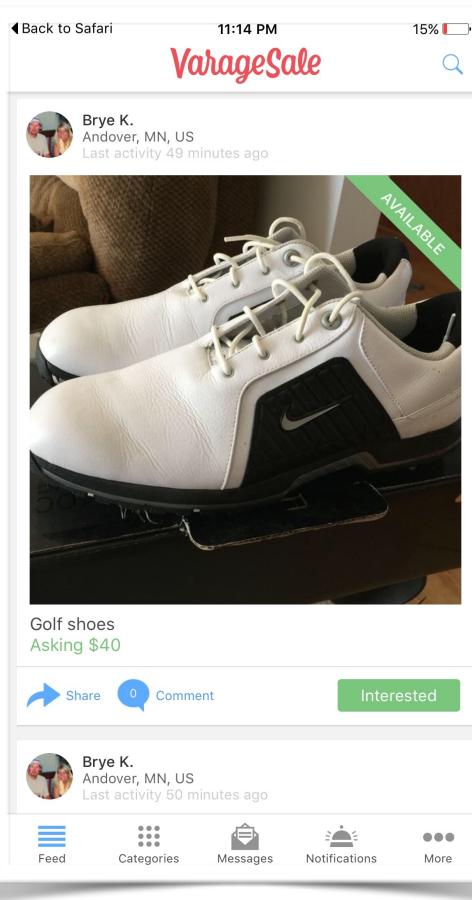
## iOS Competitors

### Veragesale

Rating - 4.5/5 stars

Free

Veragesale is a start up from Canada started around the same time as Letgo but is noticeably less popular. Veragesale also focuses on strictly allowing users to buy and sell with others that live in the area, instead of shipping out products. Veragesale was also successful with funding for developing and marketing, raising around \$34 million.



# Competitor SWOT

## Competitor SWOT

OfferUp 4/5 Stars

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"><li>• Over 10 million app downloads</li><li>• Easy to find 3rd when searching in the App Store</li><li>• Update May 23rd 2016</li><li>• Completely Free</li></ul>	<ul style="list-style-type: none"><li>• Not optimized for iPhone 6 plus</li><li>• Can't search oldest to newest and priced low to high at the same time.</li><li>• A lot of bugs reported by reviewers</li></ul>	<ul style="list-style-type: none"><li>• Optimizing for iPhone 6 plus is a easy update fix.</li><li>• Additional filters can be released with device size fix.</li><li>• With the amount of funding OfferUp can easily update the bugs and add more features to set them apart from LetGo</li></ul>	<ul style="list-style-type: none"><li>• Strong User Base</li><li>• 2 rounds of funding to be used on Marketing and Development</li><li>• Resources to push out updates frequently.</li></ul>

LetGo 4.4/5 Stars

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"><li>• 2 million user in under a year</li><li>• Over \$100 million raised in funding</li><li>• Update May 27th 2016</li><li>• Completely Free</li></ul>	<ul style="list-style-type: none"><li>• UI is un-original almost an exact copy of OfferUp</li><li>• Users are sending offers with no way for users to know how reliable that person is.</li><li>• Main view doesn't provide a lot of info.</li></ul>	<ul style="list-style-type: none"><li>• LetGo has the funding to update their UI considering that OfferUp came out in 2011 and uses the same layout.</li><li>• LetGo could look at VerageSale's layout and learn that more information about the listing on the main screen could be helpful.</li><li>• A user rating system will allow people to quickly judge how reliable the listing is.</li></ul>	<ul style="list-style-type: none"><li>• LetGo is backed by great funding</li><li>• Resources to for a great marketing strategy</li><li>• Loyal users who left craigslist and other apps.</li></ul>

# SWOT Continued...

VerageSale 4.5/5 Stars

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> <li>Raised \$32 million</li> <li>Great Reviews</li> <li>Update May 24th 2016</li> <li>Completely Free</li> </ul>	<ul style="list-style-type: none"> <li>Small user base</li> <li>Users need to create an account to view listings</li> <li>Can only use Facebook to do so.</li> </ul>	<ul style="list-style-type: none"> <li>VerageSale could focus on providing a better UI than OfferUp or LetGo since both are very similar</li> <li>Allow users to skip creating an account to view listings</li> <li>Allow users to create an account with an email and pick a username since Facebook accounts will show a user's real name</li> </ul>	<ul style="list-style-type: none"> <li>For the most part the application is flawless. It has great reviews with no reports of bugs. Bartr will need to be easy to use and hassle free to compete.</li> <li>Resources for Marketing</li> <li>High App Store rating even though it has less downloads.</li> </ul>

Bartr SWOT

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> <li>Simple UI</li> <li>Quick posting with limited registration requirement</li> <li>Can view listings without registration</li> <li>Chat with blocking</li> </ul>	<ul style="list-style-type: none"> <li>Major competition</li> <li>Application can be developed by a single developer leaving room for more competition to copy the app.</li> <li>No single feature that stands out.</li> </ul>	<ul style="list-style-type: none"> <li>Data save to FireBase which is expandable with growth.</li> <li>In-app purchases for early notifications in the future.</li> <li>Create a rating system for sellers and buyers</li> </ul>	<ul style="list-style-type: none"> <li>Low initial user number due to funding.</li> <li>Can be duplicated</li> <li>Growing a user base over a large area will make it harder for people to meet each other.</li> </ul>

# Features

## Required Features

### • In App Messaging System

- This will allow buyers and sellers to communicate with each other without the need to provide an email or phone number

### • Block Messages

- Users will be able to block each other to minimize spam.

### • Map View

- In addition to a list View a map view will display all or searched items on a map based on the users location

### • Social Media

- Social Media will allow the users to share items they posted with Bartr on Twitter, Facebook and Instagram.

### • User Ratings

- Users will be able to rate each other based on their experience

### • User Login, Register and Profile

- Users will be able to register and log in to manage their posts as well as to edit their profile, posts etc.

## App Actions

### • Login/Register

- Users will be able to login and register to view posts and contact others

### • Search Listings

- Users will be able to search for listings

### • Filter By Location

- Users can filter searches based on location

### • Create A Post

- Users can create listings with images of the item, location, description and type of Bartr, for sale, looking for or trade.

### • Message Other Users

- Users will see threads based on listings, they will also be able to block others from contacting them.

### • Share posts on Instagram, Facebook, Twitter

- After creating a listing users will be promoted with the option to share on social media.

# Bartr Tasks

## Functionality

Feature	Tasks	iOS (Estimate)
User Login, Register	<ul style="list-style-type: none"> <li>• Firebase User Authentication</li> <li>• Login screen <ul style="list-style-type: none"> <li>- Login with email and password</li> <li>- Option to Register</li> <li>- Password Recovery</li> </ul> </li> <li>• Register screen <ul style="list-style-type: none"> <li>- Register with email, username and password</li> <li>- User Profile Photo</li> </ul> </li> </ul>	6 hours 5 hours  3 hours  1 hour
Creating a Post	<ul style="list-style-type: none"> <li>• Firebase Database</li> <li>• Post Information <ul style="list-style-type: none"> <li>- Camera and Photo Gallery <ul style="list-style-type: none"> <li>-Users will be able to post up to 5 images of their item</li> <li>- The first Image will be displayed on the main screen</li> <li>- More images available in a slide view once listing is selected</li> <li>- Location <ul style="list-style-type: none"> <li>-Users general location will be set automatically but the user will be allowed to change it.</li> </ul> </li> <li>- Description <ul style="list-style-type: none"> <li>- User will be able to provide a quick description about the item.</li> </ul> </li> </ul> </li> </ul> </li> </ul>	30 hours 10 hours
In App Messaging	<ul style="list-style-type: none"> <li>• Firebase Storage <ul style="list-style-type: none"> <li>- Save all the chat messages and delete them when the user removes threads from within Bartr</li> </ul> </li> <li>• Contact Users from within the post. <ul style="list-style-type: none"> <li>- Users will be able to contact each other with a click of a button within the post.</li> </ul> </li> <li>• Block Users <ul style="list-style-type: none"> <li>- Give a notification to sender that they have been blocked by the user</li> </ul> </li> <li>• Message threads based on posts and users <ul style="list-style-type: none"> <li>- First chat screen will be organized by listings and the second screen will be organized by users.</li> </ul> </li> </ul>	20 hours 10 hours 10 hours 10 hours
Map View	<ul style="list-style-type: none"> <li>• Show posts around user based on radius</li> <li>• Show map view when user searches</li> </ul>	5 hours
Social Media	<ul style="list-style-type: none"> <li>• Post to Twitter, Facebook, Instagram <ul style="list-style-type: none"> <li>- A post formatted based on the users listing</li> </ul> </li> <li>• Share a post from other users listings</li> </ul>	5 hours  5 hours
Search	<ul style="list-style-type: none"> <li>• Search based on location</li> <li>• Search based on listing type, for sale, looking for, or trade</li> </ul>	10 hours 5 hours

Total **135 hours**

# Bartr Tasks Continued...

## Functionality Timeline Continued

Managing Data	CRUD Functions in Fire Base - Create a post for everyone to see - Everyone can read posts. - Only users who posted the listings can edit and delete them.	30 hours
User Rating	<ul style="list-style-type: none"> <li>• Users will be able to rate each other based on communication and transaction</li> <li>- Allow seller to end listing</li> <li>- Prompt to leave the other user a rating</li> <li>- Prompt buyer to verify transaction and to leave a rating for the seller.</li> <li>• Notification for pending rating</li> <li>• ratings in public user profiles</li> </ul>	30 hours
Amazon Similar Items	<ul style="list-style-type: none"> <li>• Allow users to see prices on Amazon</li> <li>- Display results below listing information</li> <li>- Implementing API for price comparisons</li> <li>- Opening results</li> </ul>	30 hours

Total **90 hours**

## Design Timeline

App Start	App Icon Launch Screen	4 hours 5 hours
Screens	Login Register Feed MapView Create Post Profile Messages	20 hours
Assets	Logo Login Button Register Button Login/Logout Button Create Post Tab Button Profile Tab Button Feed Button Share Button Message Button	20 hours

Total **49 hours**

**Total Project Hours 275 hours**

# Style Guide

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## 01 Color Palette

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## 02 Typography

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# Avenir

## Navigation Bar Title

User Name/ Listing Title

Description/ Labels

Views

Listing Type/Location

## Heavy 26pt

Heavy 15pt

Medium 15pt

Heavy 13pt

Book 13pt

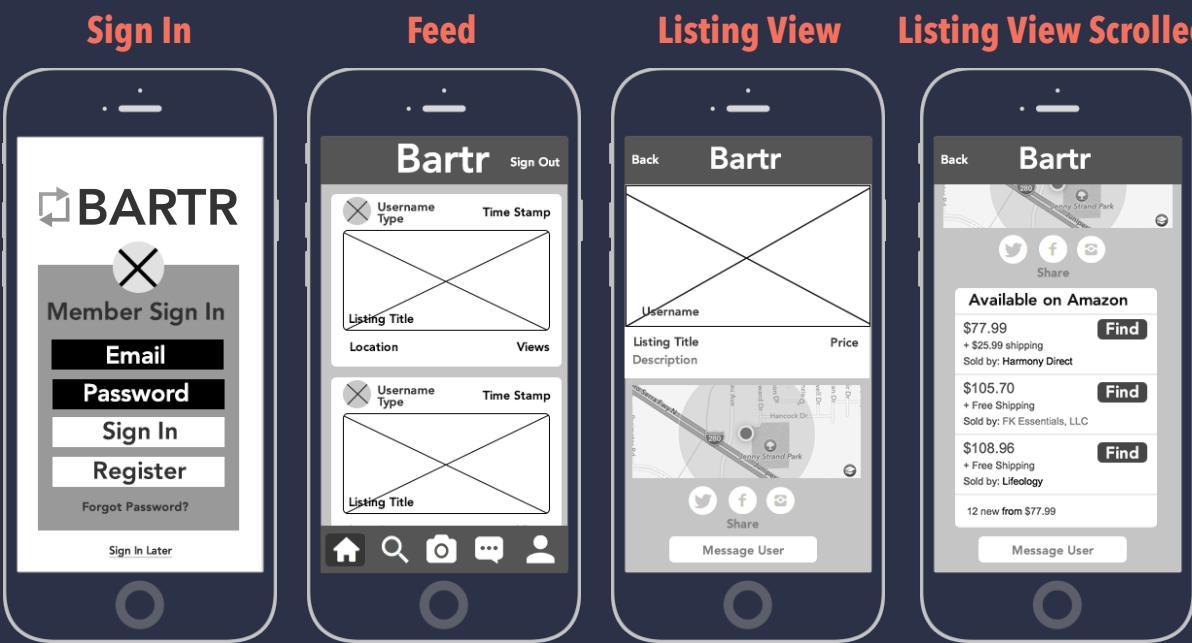
## 03 Logo/Icon

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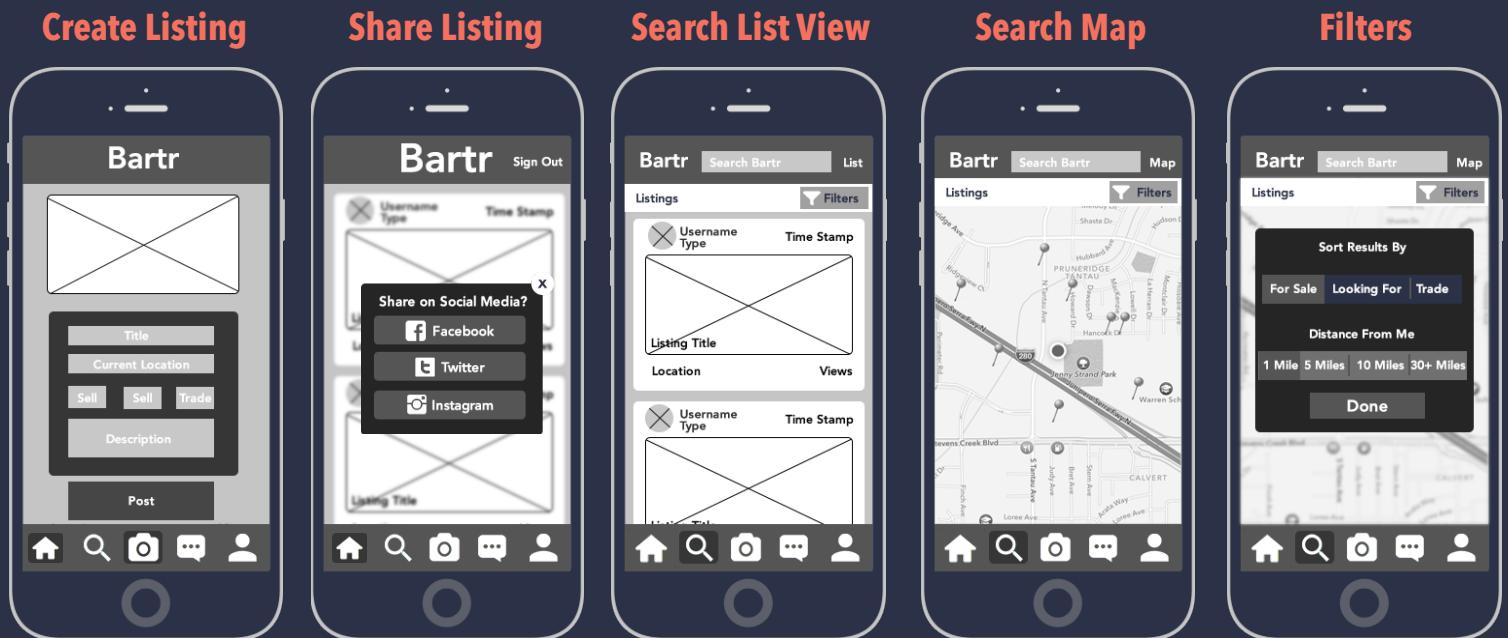


# Bartr Wire Frame

## 01 Main Feed/Listing

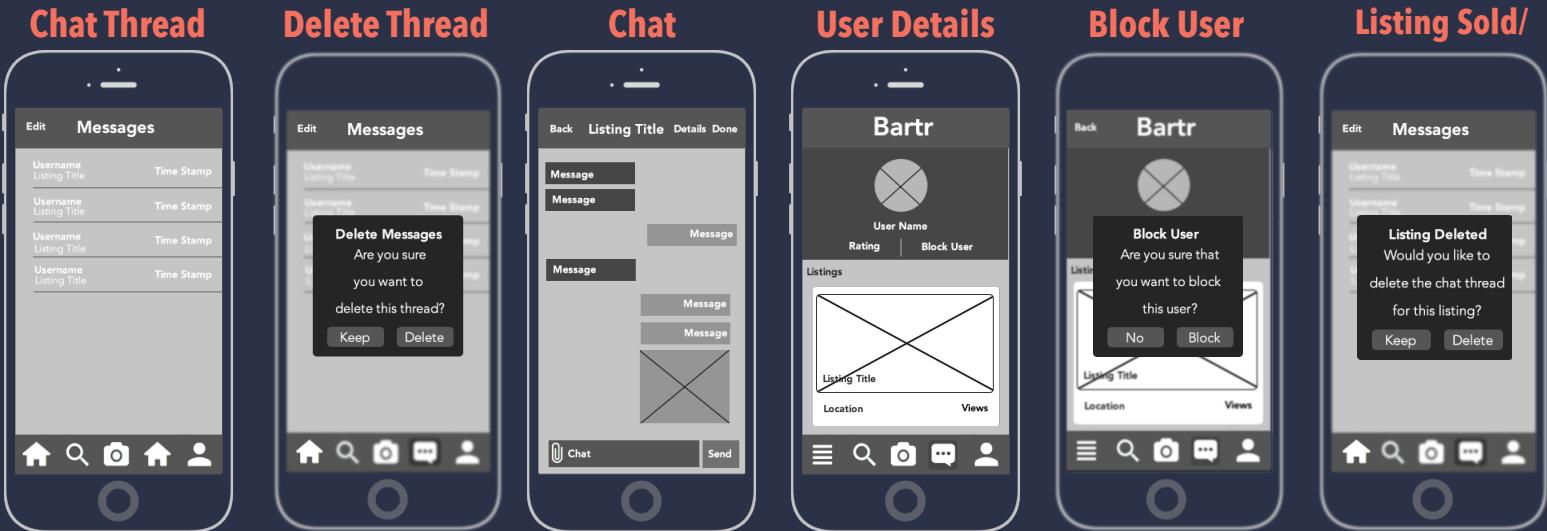


## 02 Create Listing/

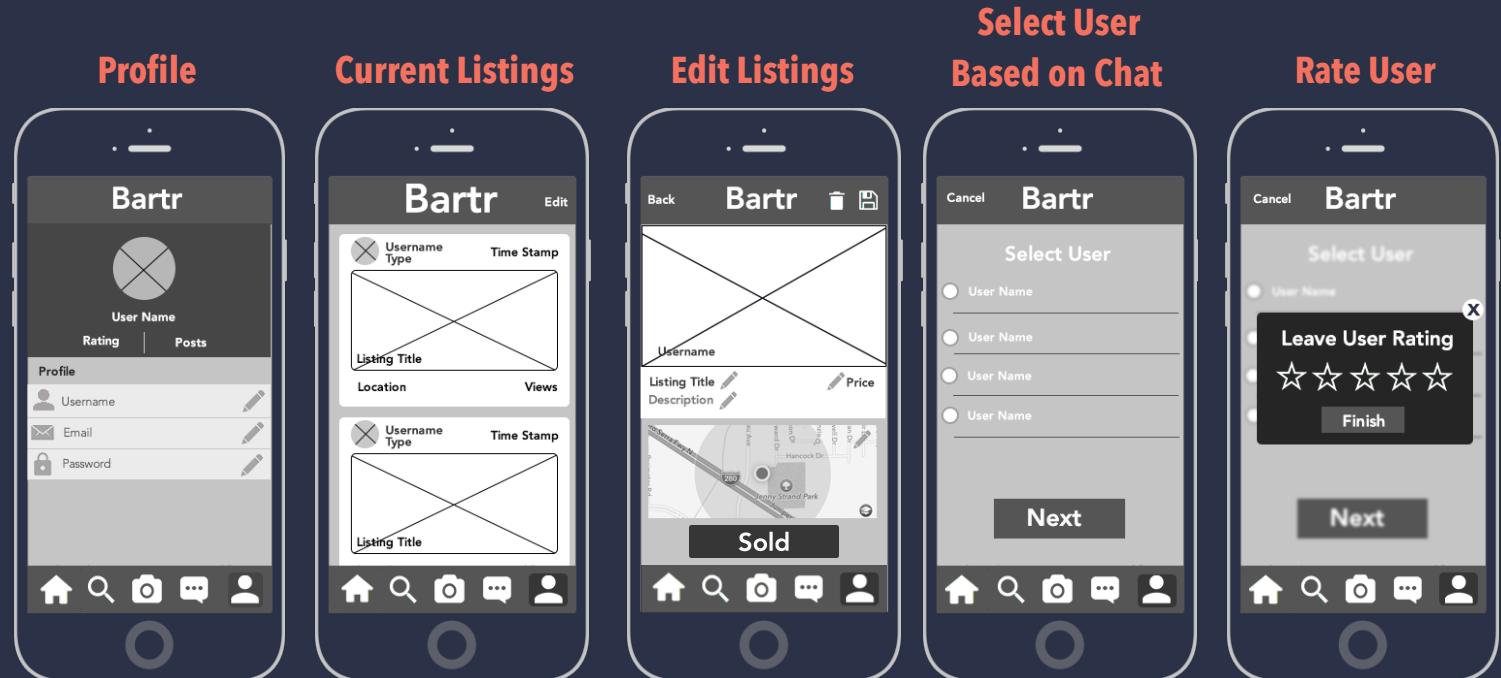


# Bartr Wire Frame Continued

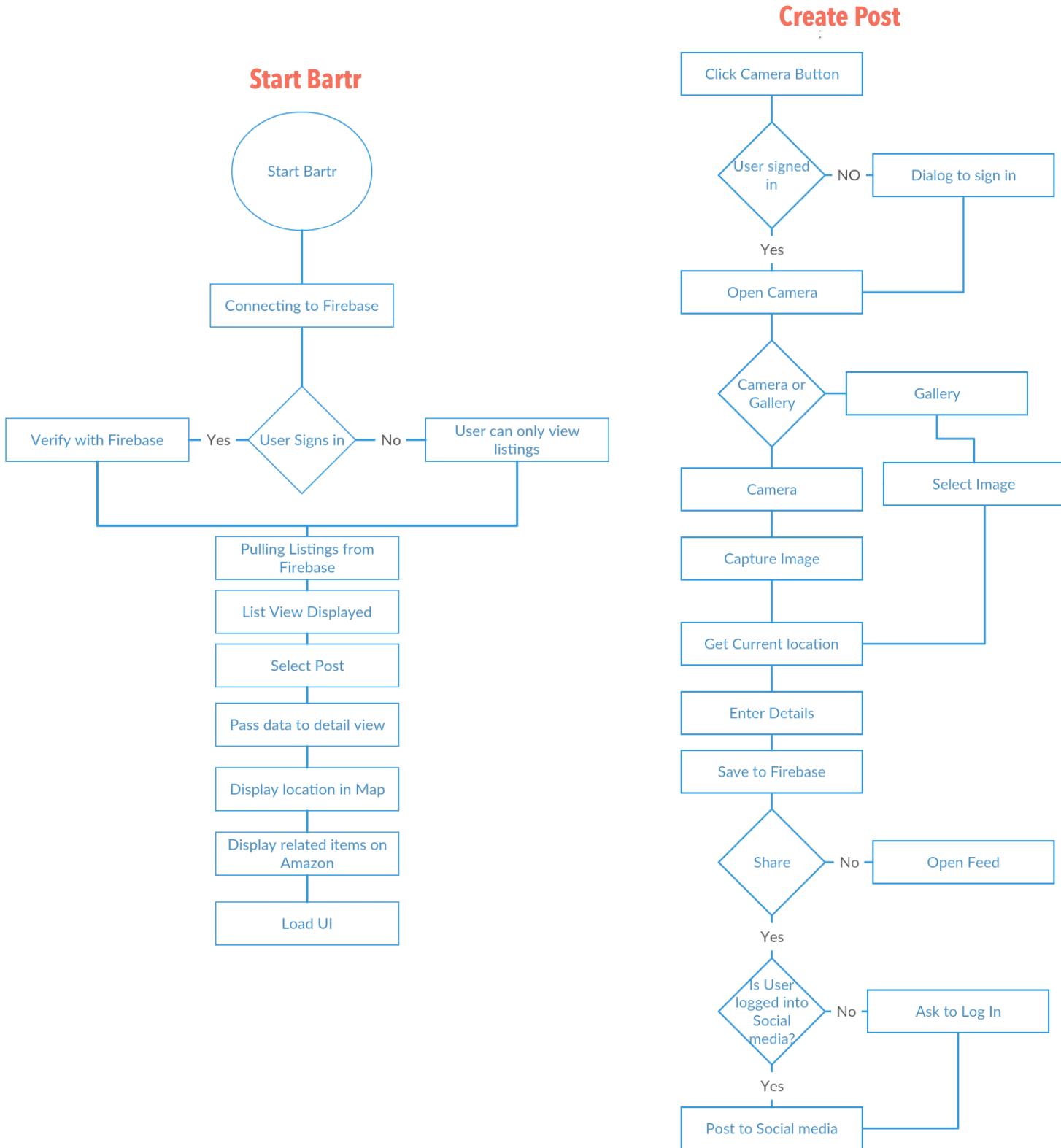
## 03 Chat



## 04 User Profile

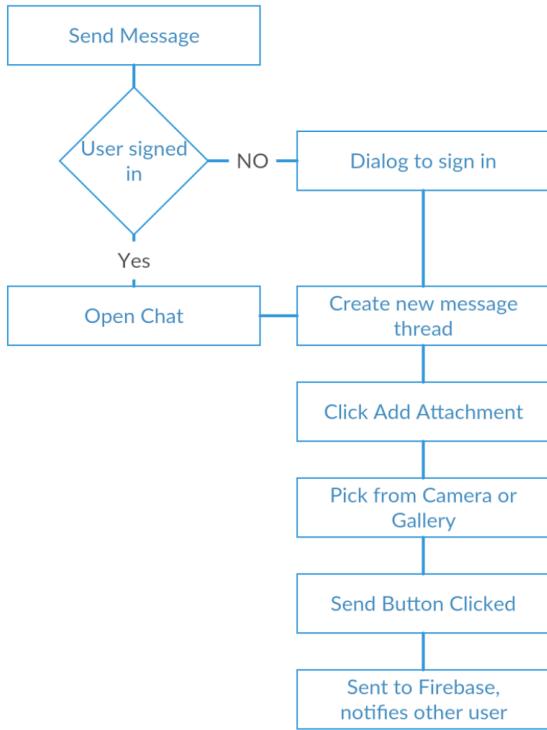


# Flow Chart

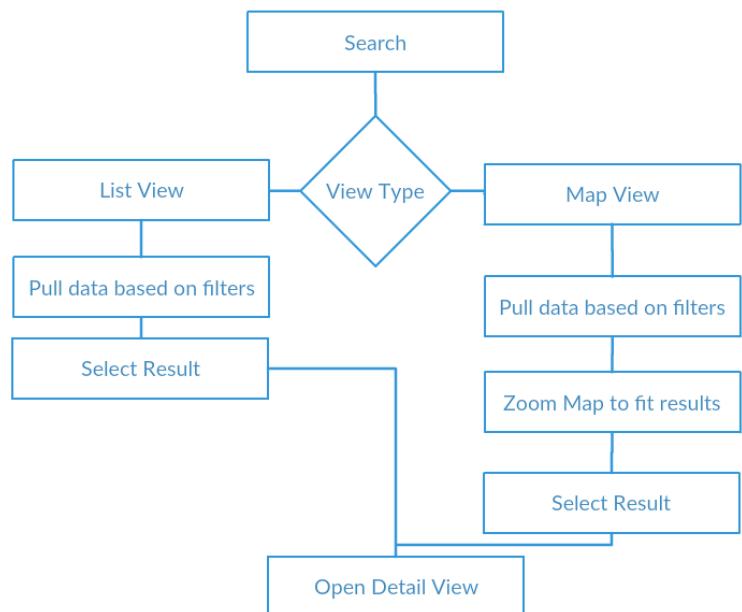


# Flow Chart Continued

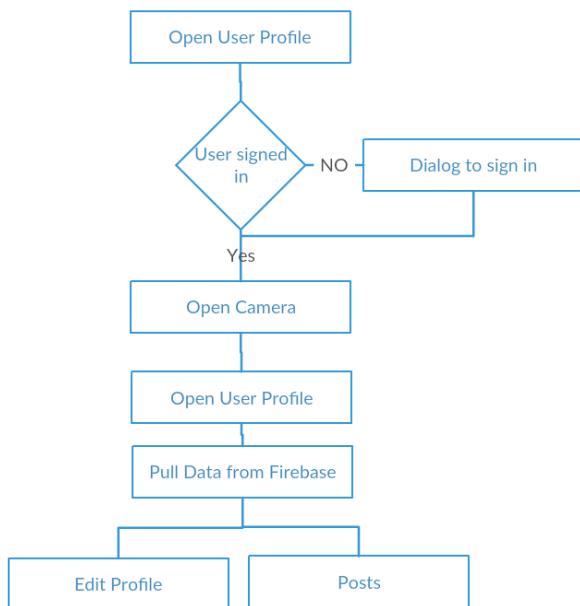
## Create Chat



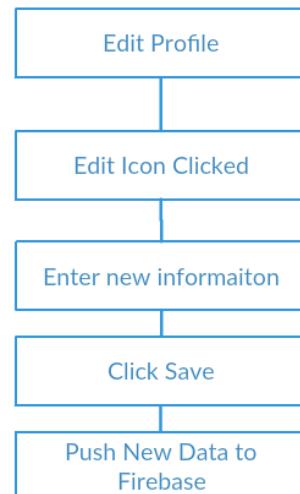
## Search



## Profile

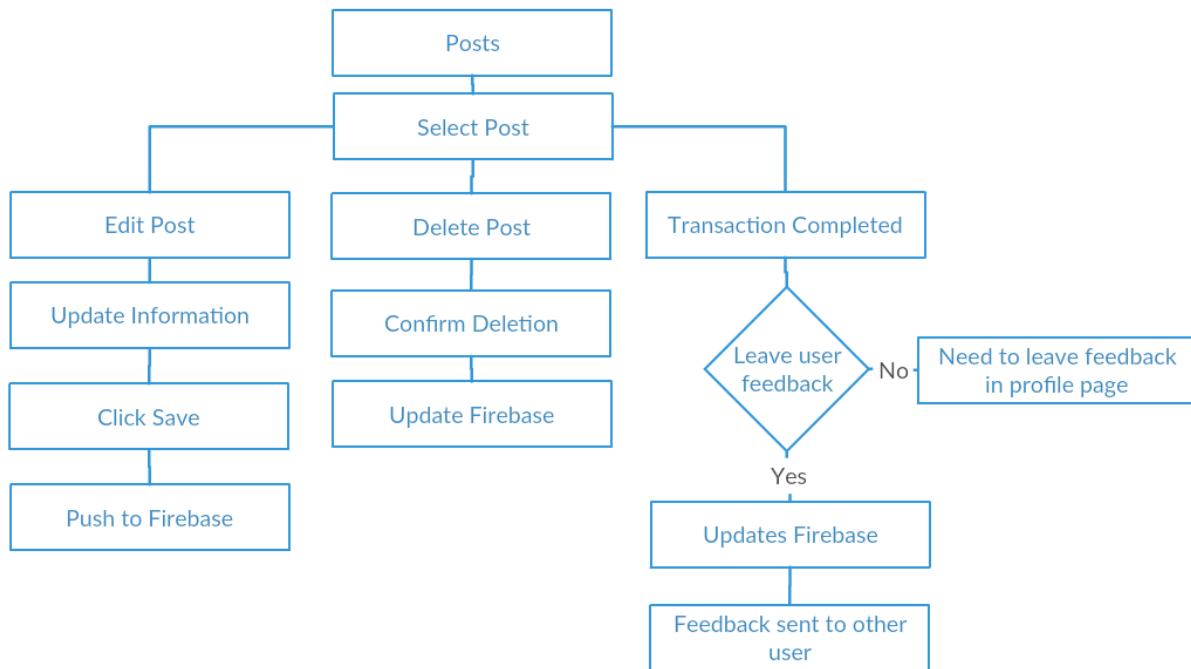


## Edit Profile

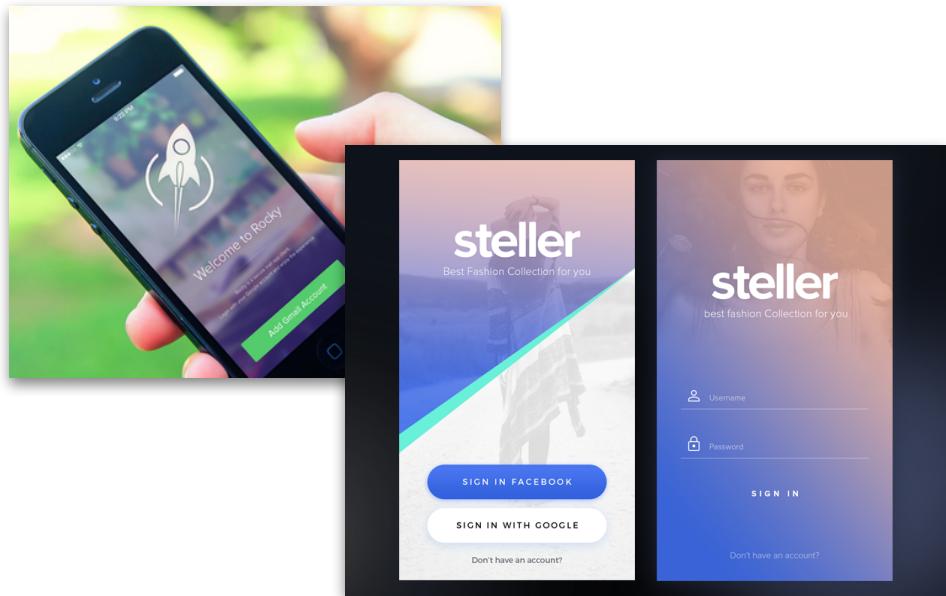
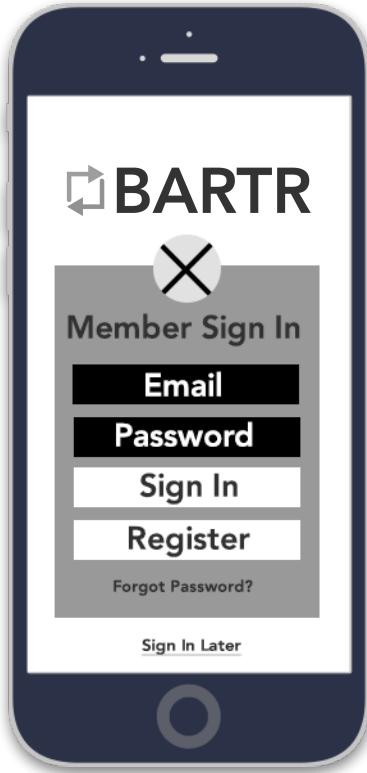


# Flow Chart Continued

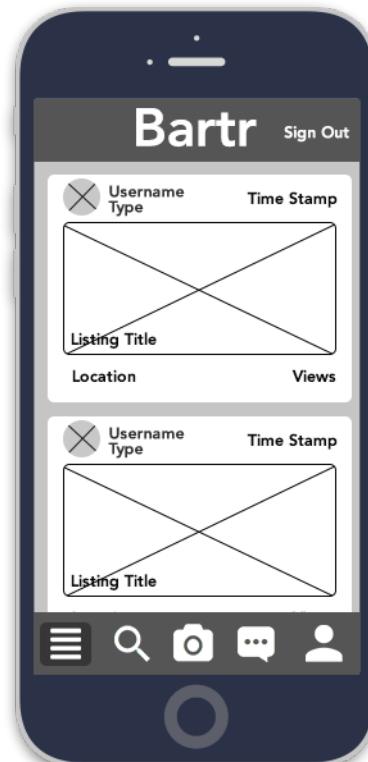
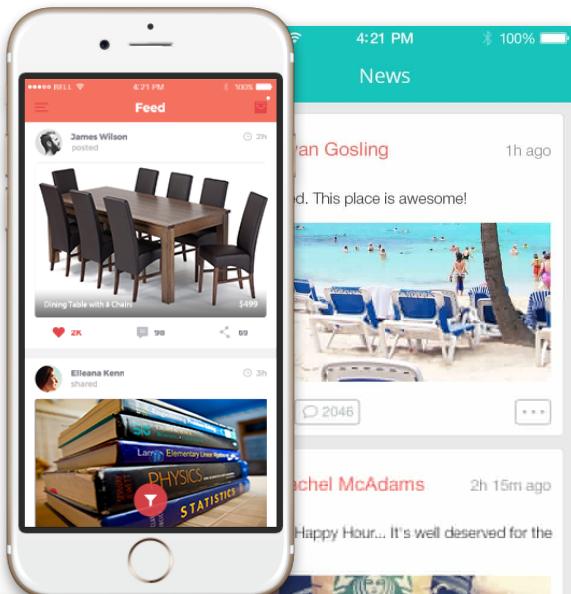
## Current Listing



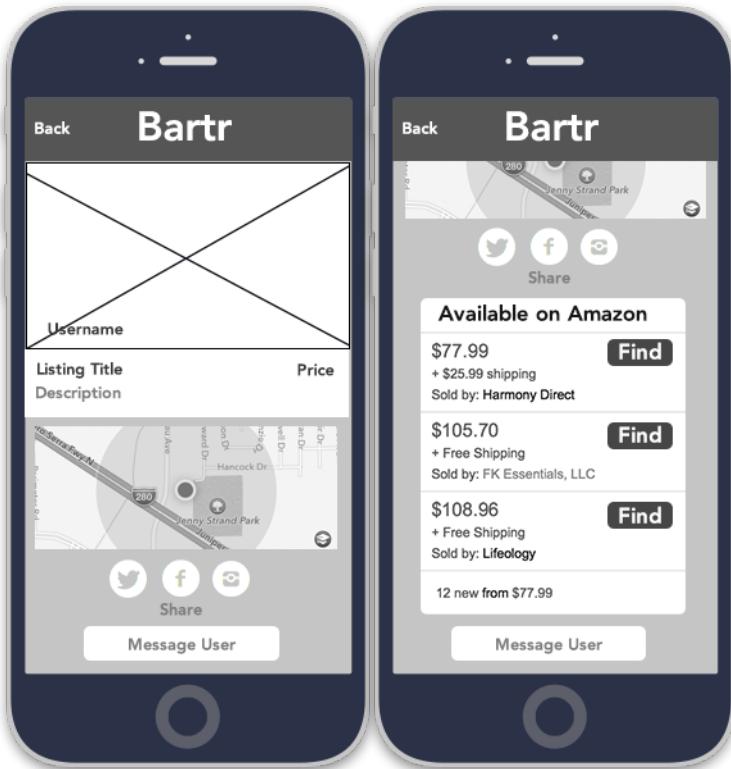
# Mood Boards



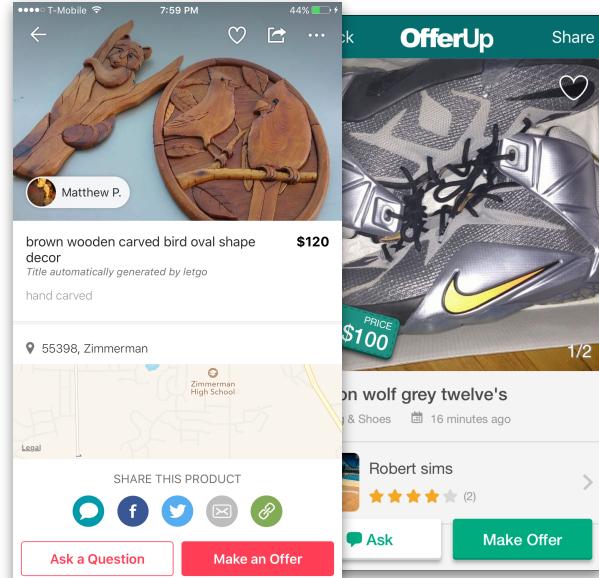
## Feed



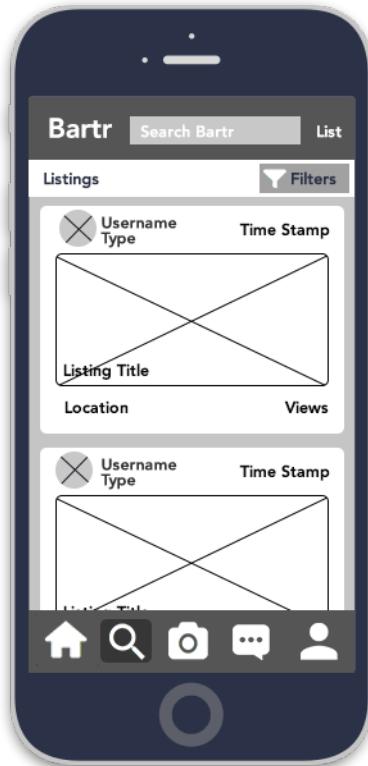
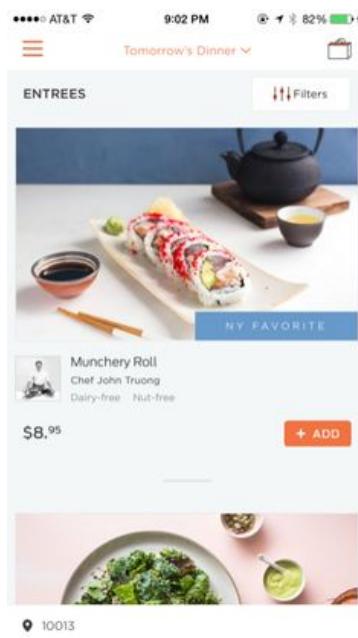
# Mood Boards Continued...



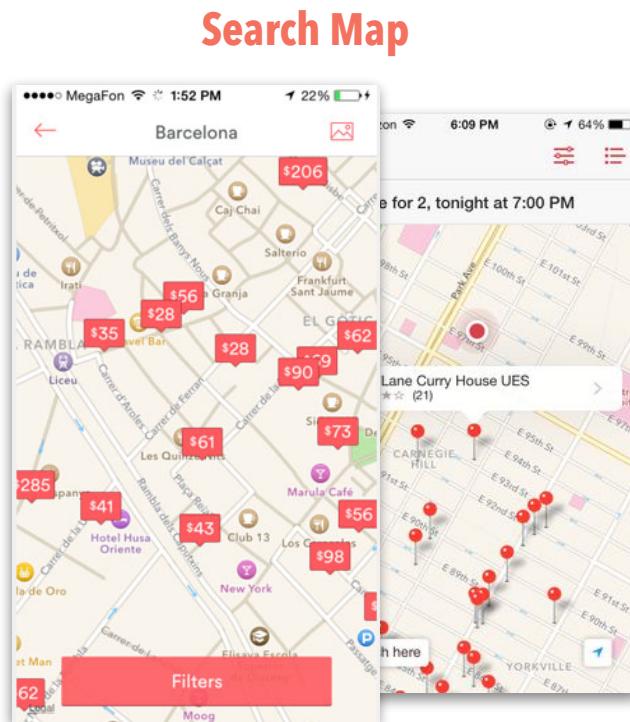
## Listing View



## Search List View



# Mood Boards Continued...



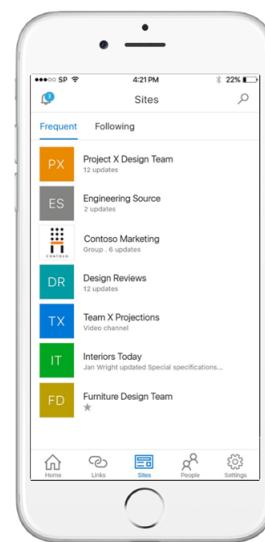
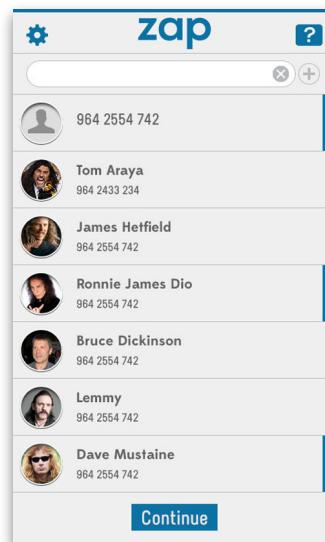
## Create Post

A screenshot of the OfferUp 'Create Post' form. It starts with a header 'Back' and 'OfferUp' with a 'Close' button. The main section is titled 'Describe Your Item' with a dropdown menu set to 'Electronics'. Below this is a 'Condition' slider set to 'Used (normal wear)'. There is an optional 'Description' field with a placeholder 'Description (optional)'. At the bottom is a large green 'Next' button. At the very bottom are five small circular progress indicators labeled 'Photos', 'Details', 'Price', '3', and 'Finish', with 'Details' currently highlighted in blue.

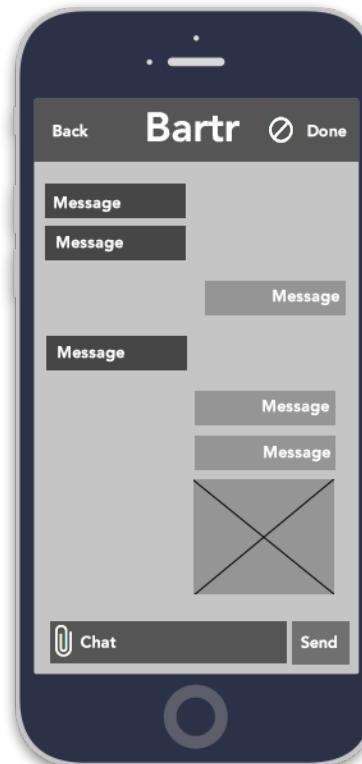
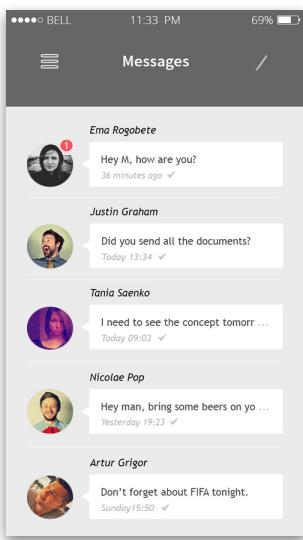
# Mood Boards Continued...



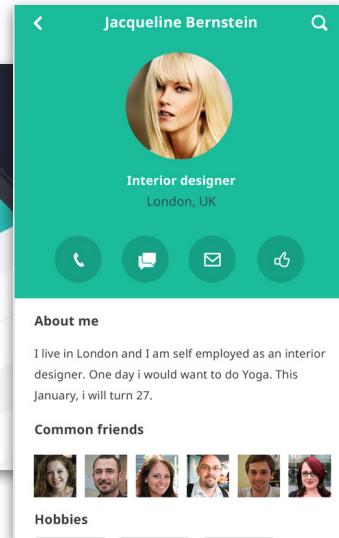
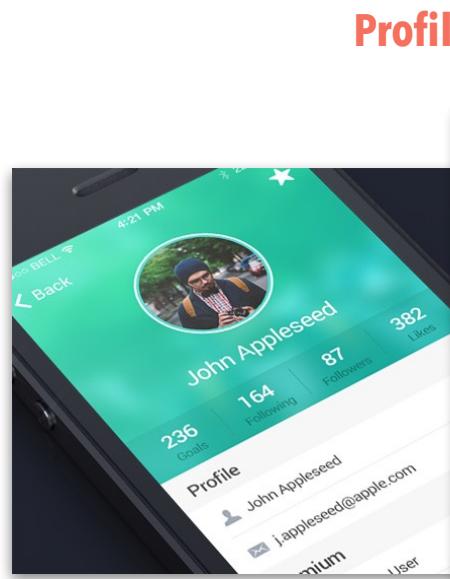
## Chat Threads



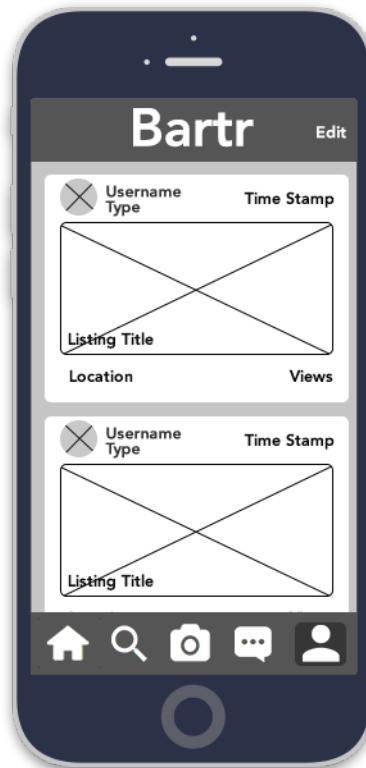
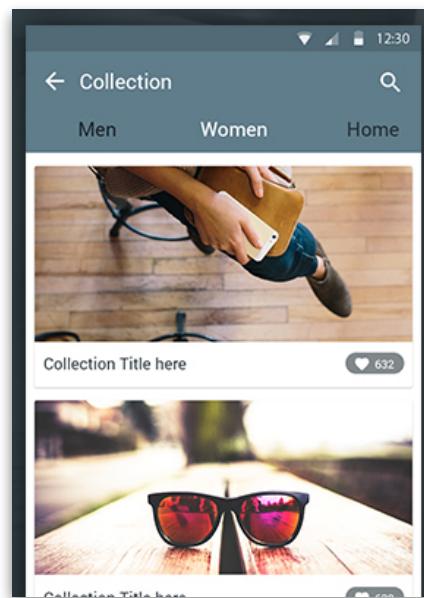
## Chat



# Mood Boards Continued...



## Edit Listings



# Timeline



# Bartr Milestones

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## 01 Prototyping

For the prototyping portion of my development I will be using Xcode's storyboards to develop the layout and look of Bartr allowing me to quickly jump into coding the following week. The main goal of this week is to develop all the required assets for the application using Illustrator and photoshop, add them to the project and to allow for navigation between all the screens with static information, functionality is not vital for the end of the week.

### Requirements

- App Icon
- Launch Screen
- Buttons created in Photoshop
- Logo for the login screen
- Image for login and registration screen background
- Layout and Navigation between screens
- Static Images for the posts

## 01 Coding Begins

The primary focus of week 2 will be to connect Bartr to Firebase so features like accounts, chat and posting can start being developed. Coding of user accounts and CRUD functionality must start as soon as possible to have basic functions by the end of the week. Amazon comparison and Chat will start taking form and will need to have at least basic functionality by the end of the week.

### Requirements

- Firebase Connection
- Create user accounts with Firebase authentication
- User will be able to create a post and view them in the main feed
- clicking on the listing will display a full screen view of the item
- User will be able to edit and delete the listings
- User will be able to create a chat from a listing

### Requirements

- Users will be able to delete threads
- Users will be able to block others
- User will be able to create a post and view them in the main feed
- Profile Screen will display user information and allow them to edit it.
- Amazon Api connected
- Display amazon items in the bottom of the listing.

# Bartr Milestones Continued...

## 03 Alpha Build

CRUD and chat will be a priority to completing the alpha build by the end of the week. In addition to CRUD and chat Search and filter should be working along with both the list and map view.

### Requirements

- Working CRUD and Chat with little or no bugs
- Amazon API with little or no bugs
- Allow user to post to Facebook(Their own listings as well as other)
- Allow a user to mark the listing as sold or traded
- Ask user if they want to delete the related chat thread.
- Fix any bugs

## 04 Beta Build

The beta build will focus on all the major features of Bartr, Social Media, Chat, Map View, Photos and filtering. Steps will be taken to insure that these features are as seamless as possible and ready for user testing. Going through the app to reproduce possible steps that the user will take will allow me to fix as many bugs as possible before user testing.

### Requirements

- Allow users to add attachments to message threads
- Leave user rating after marking a listing as sold, traded or deleted
- User rating will be shown in the user profile and under listings
- Open Amazon links from with in listings
- Display listings that still require feedback in profile page.

# Bartr Milestones

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## 05 User Testing

User that are in the target demographic will be found and asked to use Bartr for a week so information can be gathered about the apps to help improve any features or to fix any major bugs.

### Requirements

- Gather around 20 iPhone users
- Users must be in the target demographic.
- Set up the users in iTunes Connect
- Keep track of any bugs or feature changes to be fixed in the following week

## 06 Product Launch

Information gathered from user testing will be organized from high to low priority. The goal for the final week is to fix all the major bugs and as many of the minor bugs in Bartr. Like in week 4 a final run through of the app will take place to make sure there aren't any major bugs and that any new bugs haven't appeared as a result of other bug fixes.

### Requirements

- All major bug fixes and crashes removed.
- Majority of minor bugs removed
- The application should be completed with all major features working flawlessly.
- Ready for App Store launch

# Developer Profile



## Lead Developer

Ian Dorosh

### About

Student majoring in Mobile Development at Full Sail University. Ian Dorosh has been coding and designing applications for both iOS and Android devices for the past 2.5 years, with over 20 applications developed during that time. Currently he has two games in the Apple App Store that are linked below as well as a Github link with various applications coded with Xcode, Android Studio and BlueJ.

### Simple Addition

<https://itunes.apple.com/us/app/simple-addition/id1097575750?mt=8>

### Just Keep Flying

<https://itunes.apple.com/us/app/jkf/id1087696217?mt=8>

### GitHub Repo

<https://github.com/iDorosh/Projects>

# Resources

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