# Bartr

#### Team 26 - Product Backlog

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#### **Problem Statement**

A common issue in society today is that people require a good or service but may not have the money to pay for it. Although money is the driving factor of most sales, we believe that bartering is an effective means of payment. With Bartr, users will be able to easily exchange these items for other goods or services in their area. This will allow people to get what they need by providing other means than just money. While there are other existing online bartering solutions, none of them integrate the exchange of goods for services or services for goods, and do not incorporate proper communication between other users before, during, or after transactions.

## **Background Information**

#### Audience

In today's society, to get something, a person most likely has to pay for it. Whether it be a service like a dryer repair, or purchasing a new TV, it usually comes with a price. Purchasing these items or services can be a burden for some. Rather than purchasing, people can offer their own goods or services for other's amenities. This allows any user to be able to obtain and sell goods and services without relying on money, but by the effective means of trade, bartering.

#### **Similar Platforms**

There are multiple websites that emphasize bartering, but most of them are only oriented towards the exchange of goods. For example, Freecycle, BarterOnly, and Listia are a few websites that allow for the purchase of goods via money or other goods. These websites post listings of items for sale, and users can see and bid on certain goods. All of these sites have similar implementation, and are very bare in terms of functionality. As a team, we plan to provide a better alternative for exchanging goods and services.

### Limitations

The aforementioned websites limit themselves to just the exchange of goods, rather than allowing the exchange of goods for services. These websites also have very simple but unorganized interfaces. The listings aren't grouped well, and don't provide much information or interaction. We plan on differentiating our website by providing a platform that allows people to exchange goods for services like a car repair, or a dog sitter. The scope of our project will be geared towards close communities. By doing this, we will make our site profile based and have a much cleaner interface. Its user interface will be structured like a social media site, which will allow users to interact with each other to find what they need in a organized and efficient fashion.

## **Functional Requirements**

- 1. As a user, I would like to register an account on Bartr using Facebook authentication to be able to create a profile.
- 2. As a developer, I want to ensure that no two users register with the same email, so that the website doesn't have duplicate users.
- 3. As a user, I would like to login in to Bartr to access my profile, manage my listings, and search for goods in my area.
- 4. As a user, I would like to manage my account information, so that I can have the ability to change my information.
- 5. As a user, I would like to view other's profiles to view their listings and services they offer
- 6. As a user, I would like to view my own profile, so that I can access my own listings and account information.
- 7. As a user, I would like to post a listing on Bartr, so others can see what I have to offer.
- 8. As a user, I would like to view a feed of listings in my area to browse services and goods I can exchange for.
- 9. As a user, I would like to rate my experience with other users, so I can tell if other users offer good services.
- 10. As a developer, I want to ensure users can't rate another user more than once, so that they don't inflate or deflate another user's rating.
- 11. As a user, I would like to search for specific goods in my area, so I can easily find what I am looking for.
- 12. As a user, I would like to set my viewing radius of other offers, so I can limit how far I am searching from me.
- 13. As a user, I would like to send another user a direct message, so I can easily communicate with the other person involved in the barter.
- 14. As a user, I would like to view my messages, so that I can read and manage conversation with other users.
- 15. As a user, I would like the ability to delete my listings, so that its show the barter has been completed or the offer exists anymore.
- 16. As a user, I would like the ability to edit any of my listings, so that I can correct any information that is wrong or edit any information on the listing.
- 17. As a user, I shouldn't be able to edit anyone elses listings, so that no one else can edit my listings and vice versa.
- 18. As a user, I shouldn't be able to remove other's listings, because that is beyond a general users scope on a social media site.
- 19. As a user, I should be able to report another user so that I can alert of any users or listings that aren't appropriate.
- 20. As a user, I want to be able to delete my account, so it doesn't exist on the website anymore.
- 21. As a user, I want the ability to choose what contact information I want to be public so I can protect myself from malicious calls/texts/emails not relevant to my listing.

- 22. As a user, I want the ability to tag the item/service I list and what I am looking for, so others know briefly what the listing entails to at a quick glance.
- 23. As a user, I would like to filter items in my listings feed by tag, so I can reduce the clutter of the listings to what I'm looking for specifically.
- 24. As a user, I would like to be able to send an email for support assistance, so I can obtain help with issues beyond a user's control.
- 25. As a user, I would like to view a support/troubleshooting page, so I can attempt to solve my problem with the common issues and solutions provided or find contact information for additional help.
- 26. As a user, I would like to request my password with the paired email when I forget my login, so I can log in to my account again.
- 27. As a developer, I would like to query user posts based on geolocation of each post, so I can display all listings around by a specific radius.
- 28. As a user, I would like to see another user's public contact information, so I that I know how to contact them for exchanges (unless hidden by user, must ask via direct message for public contact information).
- 29. As a user, I would like to apply to be a verified barterer if my trades and rating meet the requirement, so that others can visibly see, as a barterer, I can be highly trusted.
- 30. As a developer, I want to create a system for managing, tracking, and executing transactions between users so that I can automate the handling of transactions.

## **Non-Functional Requirements**

- 1. If time allows, I would like to ensure that the web pages are formatted for all browsers and mobile devices.
- 2. As a developer, I would like to use the Facebook API to allow for secure logins.
- 3. As a developer, I would like to create Firebase functions that do not allow for reading and writing to the database unwarranted.
- 4. As a user, I would like the web interface to be easy to navigate.
- 5. As a developer, I would want the client to receive the html within 1000 milliseconds from requesting it from the server.
- 6. As a developer, I want to create a serverless application hosting using Firebase, which scales automatically based on network activity.
- 7. As a developer, I want to use a serverless application hosting, which doesn't have any security concerns that an actual server would.