betcha!

Team 19 - Product Backlog:

Kushagra Kushagra, Kyle Ohanian, Noah Smith, Peter Jones, Siddharth Shah

Problem Statement

Casual betting between friends is a very common, very unorganized affair. Then in this space there is a perfect opportunity for an application that could keep a ledger of the bets and the details. Unfortunately, current offerings do not allow betting on custom events or interaction with a social feed. This product will allow parties to organize and keep track of their bets, as well as be able to interact with their friends' betting.

Background Information

Problem

Because there are a lot of people who place "bets" with their friends, it's very hard to keep track of all of the bets that you place. When we think of betting, we think on the lines of "gambling." There are apps out there for "gambling," but people do not want to gamble. There is no app out there that allows you to place friendly bets for value, and incorporate it with social media.

Similar Applications

There are similar products that use bitcoin as a means of doing transactions, such as Betcoin, Bait, youbetme etc. The idea behind these apps are that you make proper bets with others. Betcoin uses bitcoin as a currency. Bait uses "gentleman's agreements" as a way to bet against your peers. Youbetme is a social media type betting platform.

Limitations

Each of the above apps have limitations. Betcoin does a great job with using bitcoin as a means of currency, but you are not able to place "one-on-one" custom bets with anyone. Bait has the transactions and the peer-to-peer betting down, but it only allows you to bet on sporting events, and not custom bets. Youbetme handles the social media aspect pretty well, however, no transactions are done over the app. Our goal is to

create a centralized platform that will take the aspects of cryptocurrency, peer-to-peer custom betting, and social media to combine it all into this application.

Functional Requirements

1. As a user, I would like to login to my account
2. As a user, I would like to create an account with Venmo
3. As a user, I would like to delete my account
4. As a user, I would like to create custom bets
5. As a user, I would like to send bet to friend
6. As a user, I would like to receive bets from friends
7. As a user, I would like to accept bets
8. As a user, I would like to confirm the completion of bets
9. As a user, I would like to fulfill bets using Venmo
10. As a user, I would like to view my open bets
11. As a user, I would like to edit my open bets
12. As a user, I would like to cancel my open bets
13. As a user, I would like to confirm the cancellation of a bet
14. As a user, I would like to view friends' open bets
15. As a user, I would like to like friends' bets
16. As a user, I would like to comment on friends' bets
17. As a user, I would like to add friends
18. As a user, I would like to remove friends
19. As a user, I would like to view a feed of bets
20. As a user, I would like to see past bets
21. As a user, I would like to see my betting record
22. As a user, I would like to be reminded of bets near the end of their term
23. As a user, I would like to view friends' past bets
24. As a user, I would like to report a technical issue
25. As a user, I would like to join friends' bets
26. As a user, I would like to create groups
27. As a user, I would like to create group bets

Non-functional Requirements

Environment

We are going to have a backend and frontend in two different projects. The backend will be using Python using Flask framework serving a RESTful API. We will also be using PostgreSQL to store data. We can host it locally, or use DigitalOcean or Heroku. We are going to use Android Studio 2.3 to build the front end of the app. We will be programming this in Java. It can be run on any Android device, or an emulator for testing. It will also integrate with the Venmo SDK for payment fulfillment.

Usability

The goal of the UI is to create a very simple, compact view flow in order to make sure the user doesn't get confused and doesn't have too many actions in order to get where they want. We will follow suggestions from the Google Material Design guidelines to make sure that it follows a base foundation.

Scalability

The backend is going to be written in Python. This will allow us to be able to scale it onto multiple servers. Our goal is not a certain level of requests serviced / minute but the ability to increase the server capability according to current request load.

Maintainability

We are not going to follow any specific style guides for the codebase. However, we will make sure that each developer follows their own style consistently throughout the entire application. Every time a user story is created it will be added as an issue to github, once it has been completed, it will go through a code review by others in the group to make sure it is up to standards. It will then get merged once code review is complete. The issue can then be closed with the appropriate commit. We are also going to make sure every non trivial component of the software be commented to explain the functionality of the code.

Security

With the use of the Venmo API and the payment capability, it is important that the transaction information be kept secure. In no circumstance, should the user payment data or personal information be accessible by non-authorized users.