UniTrade

Team 19 Product Backlog

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Problem Statement

We plan to design an application to allow students to buy and sell items like textbooks, course equipment, electronics, and furniture. In our daily life, it's easy to find things lying around that we really don't need anymore, things like clothes, electronics, furniture, textbooks and so much more. Keeping these items wastes space in our homes, but throwing them away wastes money! With college students this is especially important since many are on a tight budget and don't want to throw everything away at the end of the year when moving back home. While there are existing apps for people to post their own items for sale like Ebay, Letgo, and OfferUp, this app will be centered more around college students to provide a quick and easy way to trade useful items with their peers.

Background Information

The Audience and the Issue

- This app is built by students, for students. Students often are in a situation where they have stuff they no longer need (like furniture or textbooks, for example), or where they need that same stuff but don't want to pay full price for it. With our location-based trading app, users can easily find items that they might need within a selected area; also, users can easily sell the things they don't need or want anymore by creating a post that will be visible to users in the region.

Similar Platforms and their Limitations

- There are a few similar trading apps, like eBay and LetGo, but these apps have a very broad range and have a huge variety of items and users, while our app will be in a more niche market by catering mostly toward students
- eBay has a worldwide scope that forces users to think about long-distance shipping details and prices depending on what items they purchase, our app limits the scope to a region-by-region limitation to keep users within short-travel range.

Requirements

Functional

1. As a user, I would like to register a new account.
2. As a user, I would like to log into my account.
3. As a user, I would like to reset my password through email in case I forget it.
4. As a user, I would like to retrive my username if I forget it.
5. As a user, I would like to access *UniTrade* on an Android device.
6. As a user, I would like to view and edit my profile.

7. As a user, I would like to report technical issues or inappropriate information to the administrator.
8. As a user, I would like to find proper items according to the category and keyword I use.
9. As a user, I would like to be able to see a page with the specific details of an item I've selected.
10. As a user, I would like to change the posts I see based on date, price, or distance.
11. As a user, I would like to see nearby items on the homepage of the app.
12. As a user, I would like to see my purchase/sale history.
13. As a user, I would like to change notification settings.
14. As a user, I would like to add an item to a wishlist.
15. As a user, I would like to view my wishlist.
16. As a user, I would like to know when the price changes for items in my wishlist.
17. As a user, I would like to be able to message a buyer/seller to arrange face-to-face trades, if time permits.
18. As a user, I would like to be able to change the UI style, if time permits
19. As a user, I would like to be notified when another user messages me.
20. As a user, I would like to logout.
21. As a seller, I would like to post my items on the app.
22. As a seller, I would like to set the price of the item I wish to sell.
23. As a seller, I would like to add details about the item I wish to sell.
24. As a seller, I would like to include pictures of the item I wish to sell.
25. As a seller, I would like the ability to edit the information about my items.
26. As a seller, I would like to receive payments online when the trade is made.
27. As a seller, I would like to be notified when a buyer has purchased my item.
28. As a seller, I would like to submit a request to the buyer for a face-to-face meet up for trading an item, rather than shipping it.
29. As a buyer, I would like to view the reviews of a seller before purchasing an item.
30. As a buyer, I would like to write a review for a seller after completing a trade.
31. As a buyer, I would like to make payments online.
32. As a buyer, I would like to submit a request to the seller for a face-to-face meet up for trading an item, rather than shipping it.
33. As a buyer, I would like to know the tracking number if I don't choose a face-to-face trade.
34. As a buyer, I would like to see a seller's profile.
35. As a buyer, I would like to be notified when the seller ships an item.
36. As an administrator, I would like to see reports from users.
37. As an administrator, I would like to delete inappropriate posts or comments.

Non-functional
1. We must be able to run this app on an Android device, using the tools offered by Android Studio to build it. This includes making the user interface clear and easy to use.
2. An administrative program must be able to run on a desktop, allowing an administrator to perform special actions list above
3. The system must have the ability to handle at least 100 users at a time.
4. The app must be able to allow payments through current API (PayPal, initially, but can be expanded to include credit/debit options if time permits).

5. The app must be able to calculate distances between users through the app's API. Distances will be calculated based on locations of buyer and seller. As such, users are required to include some kind of address in their profile for these calculations.
6. Passwrods stored in the database will be encrypted using SQL hash functions.
7. The response time of the server needs to be less than 800ms.