

CS 407 - Boiler Buy

Product Backlog

Team Members:

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Problem Statement:

While there are endless ways to buy and sell products already, many of them come with their flaws. Facebook marketplace for example, bounds the listable prices for their items, which could result in an inaccurate post when sellers want to sell something such as a used car, which would fall out of the price interval facebook marketplace allows you to list. Another example would be Craigslist, where the UI is much too simple and outdated. Along with this, something that all the buy, sell, trade websites lack is safety, as any user can create an account to post and buy items. We plan to create a buy, sell, trade website that provides a good UI, less restrictions when it comes to selling, and limiting this marketplace to only Purdue students as this can increase the safety of this marketplace.

Background Information:

Problem/Domain/Audience

Many college students are unable to afford new products such as appliances and dorm decor. Instead, they turn to online second used marketplaces such as Facebook Marketplace and Craigslist for a cheaper price point. But how do they know if the seller is safe or if the item is what is being described. Boiler Buy requires users to have a Purdue ID and email to use the application to provide safety. The primary audience are Purdue students who want/need to sell or buy items between other Purdue students.

Similar Applications

Some similar applications where users can sell and buy locally are Facebook Marketplace, Craigslist, and OfferUp.

Limitations

Although these existing applications protect users against viruses and identity theft, they offer little to no protection for buyers or sellers. For example, anyone can post on Craigslist anonymously as the only identification needed is a valid email address.

Requirements:

Functional:

Id:	User Story:
1	As a user, I would like to access the website.
2	As a user, I would like to register for a Boiler Buy account.
3	As a user, I would like to access my Boiler Buy profile.
4	As a user, I would like to verify that I am a Purdue student.
5	As a user, I would like to change my password.
6	As a user, I would like to set a profile picture.
7	As a user, I would like to change my username.
8	As a user, I would like to reset my password if I forget.
9	As a user, I would like to retrieve my username if I forget.
10	As a user, I would like to block other users from sending me messages.
11	As a user, I would like to be able to view the website from my phone.
12	As a user, I would like to be able to upload my Venmo tag so that when I come to an agreement with a buyer/seller, it will automatically send it via private message.
13	As a user, I would like to toggle between light dark modes
14	As a user, I would like to delete my account.
15	As a buyer, I would like to shop for products.
16	As a buyer, I would like to filter by product type.
17	As a buyer, I would like to filter by a price range.
18	As a buyer, I would like to filter by a seller rating range.
19	As a buyer, I would like to see the seller's rating.
20	As a buyer, I would like to see the seller's reviews.
21	As a buyer, I would like to leave a review for the seller.
22	As a buyer, I would like to purchase a product from a seller.
23	As a buyer, I would like to choose for my purchase to be shipped.
24	As a buyer, I would like to choose to meet up for my purchase.
25	As a buyer, I would like to message the seller.
26	As a buyer, I would like to save product ads to view later.
27	As a buyer, I would like to see a history of all the products I have bought.
28	As a buyer, I would like to see a history of the products that I have recently viewed.
29	As a buyer, I would like to be able to set a safe place as a meeting location.
30	As a buyer, I would like to be able to search for items using a search bar.

31	As a seller, I would like to post ads for products to sell.
32	As a seller, I would like to add pictures of the product to my ad.
33	As a seller, I would like to access my shop (what I have for sale).
34	As a seller, I would like to set the product's price.
35	As a seller, I would like to write a description of the product.
36	As a seller, I would like to provide a shipping option.
37	As a seller, I would like to provide a shipping price.
38	As a seller, I would like to provide a meetup option.
39	As a seller, I would like to respond to the buyer's message.
40	As a seller, I would like to delete product ads.
41	As a seller, I would like to mark products as sold.
42	As a seller, I would like to group multiple product ads into a "grouped ad"
43	As a seller, I would like to see my selling history.
44	As a seller, I would like to modify ads that I've posted.
45	As a seller, I would like to indicate that I have multiple of the same product available.
46	As a seller, I would like to customize my shop front
47	As a seller, I would like to set tags for my product
48	As a buyer, I would like to save/favorite tags
49	As a buyer, I would like to filter by tags
50	As a seller, I would like to set the brand of my product
51	As a buyer, I would like to filter by brand of product

Non-Functional:

User Experience:

The primary goal of any application is to make a product that is both featureful and easy to use. Our user interface should be smooth, pleasing to look at, and simple. Navigating the web page should be effortless and straightforward. The appearance of the application should be appealing to look at while not being cluttered; moreover, it should be adaptive to both desktop and mobile devices. Additionally, the application should be responsive. The application should never freeze and search results should appear quickly because there is nothing more frustrating as a user than waiting a long time for pages and/or search results to appear.

Security

Any application involving personal information such as names, numbers, emails, and locations must ensure security. Boiler Buy will achieve this through the encryption of sensitive information such as passwords and emails within our database. Additionally, we will take precautions to test for and fix any bugs which could be exploited.

Scalability

For projects that aim to survive long-term, scalability can be very important to this goal. We have chosen to follow a model, view, controller architecture to facilitate this. This allows us to update one of the three components with minimal changes to the others. Apart from this architecture decision, we will ensure that the Boiler Buy codebase and design scales easily for future maintenance and additions.