

Project Borithrift

Tech Exchange: Unit 2 Project - Design Document

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I. Background

Thrifting is a method of exchange that is being widely used in Puerto Rico in recent years, but locally it lacks a system where all sellers can display their items in a unified online store. Most thrifters tend to buy items inside stores, and sellers tend to showcase their items through social media. We want to make a unified space, where sellers can showcase their products online in a unified space. Also, give the buyer the accessibility to view different sellers and give them more options when looking for a specific item. Because it's local, it would alleviate the shipping cost or the seller and buyer can meet in person to exchange the items.

II.



Email:

Password:

Sign in to Borithrift

Why thrift?

- Clothing is really hard to recycle
- Child labour is often used to manufacture new clothes
- Thriftig is cheaper than buying new clothes
- It's fun!



Yosemite Tee
\$15.00

S M L XL

Buy



Japan Tee
\$15.00

S M L XL

Buy



Running Jacket
\$55.00

S M L XL

Buy



Spread Energy Tee
\$20.00

S M L XL

Buy



Gym Jacket
\$45.00

S M L XL

Buy

Department:

Women Men

Browse by:

New Tops Graphic Tees

Coats + Jackets Bottoms Jeans

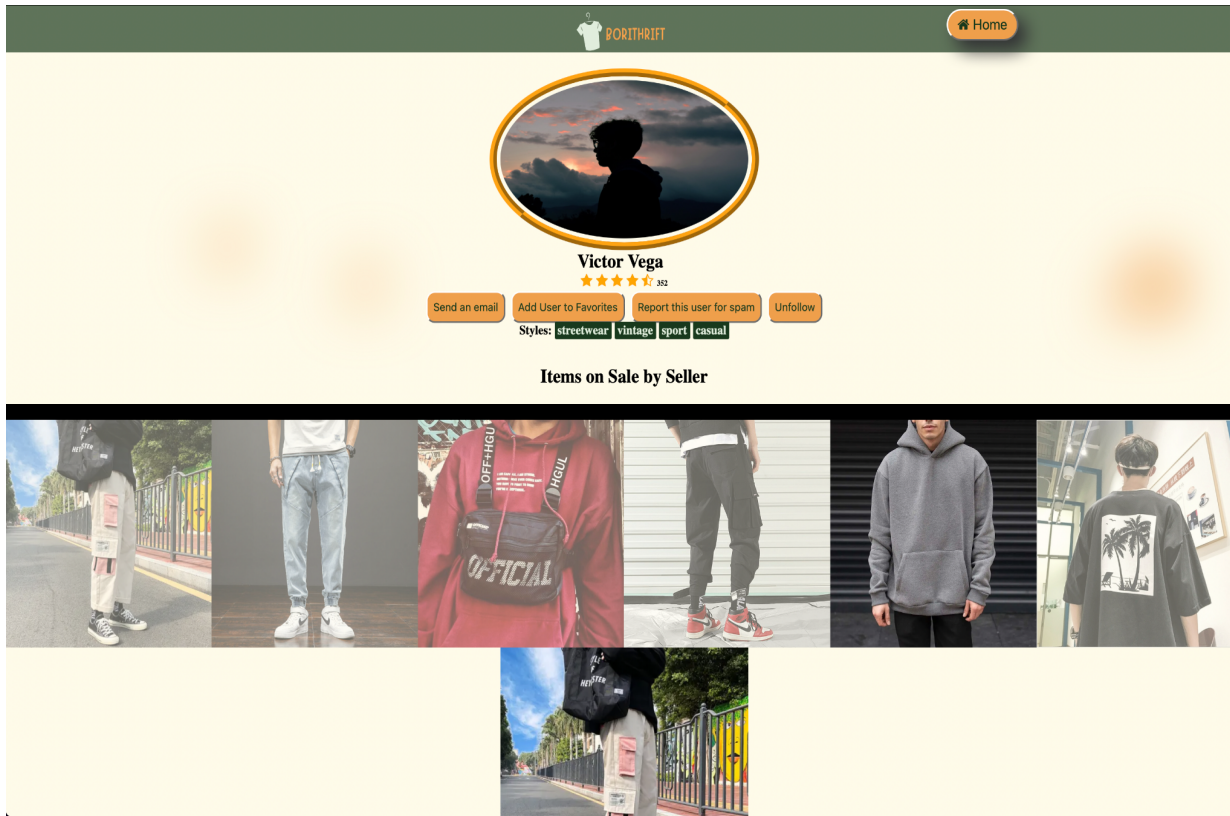
Activewear Shoes Vintage Bottoms

Sale

Search

Top sellers this week:





III. Objective

Sign in page:

- Add the ability to sign in with an email and password. Sign in email will be compared to a list of already existing emails and the password will be hashed and compared to the corresponding email.

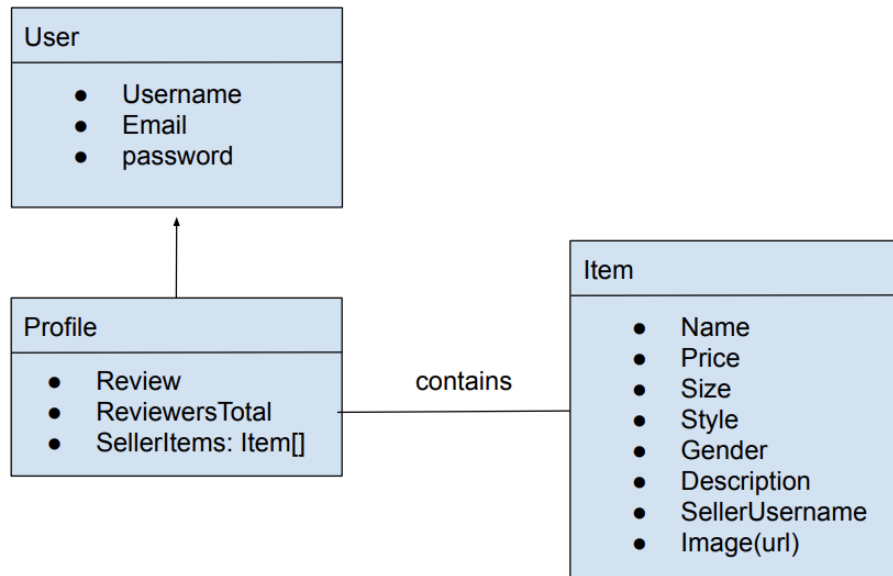
Landing page:

- Add the ability to add items to cart and wishlist.
- Add a buy button to the items displayed on the page, which will add up to the total amount from the prices of items in the cart.
- Showcase seller's profile, for them to get more interaction with buyers.

Profile page:

- Add information about name, items on sale, reviews profile picture and styles being sold to individual users.

IV. Classes



User:

- Will contain attributes of registered users and permit access if user is found

Item:

- Item is a **class** that represents an item that a user is selling.
- It also contains the following **attributes**: name, price, size, style, gender, description, image, and user who is selling the item.

Profile:

- Contains attributes for users logged in to the page, their name, their items on sale, reviews, profile picture and styles they sell.

V. Testing

User:

- The testing for the sign in page will consist of making sure the input email matches a valid email format, that the email and password does not permit access to unregistered users.
- Methods:
 - `__init__(self, email, password, username)`:
 - Checks for type error for all parameters. Then checks for valid values. If everything is correct, assign parameter values to class attributes.
 - `check_valid_email(self, email)`:
 - Checks if the input email complies with RFC 5322 email standard, if so it returns True.
 - `check_valid_password(self, password)`:

- Sleep for 1 second to prevent brute force attack. Checks if the input password is more than 8 characters long and has at least one letter and one number, if so it returns True.
- `check_valid_username(self, username)`:
 - Checks if input username is between 3 and 20 alphanumeric characters long. Usernames can also include “.” and “_”. If valid returns True.
- `hash_password(self, password)`:
 - Uses sha512 to return the hash value of input password in hexadecimal.
- `generate_user_ID(self)`:
 - Creates a unique user ID based on the sha1 hexadecimal value of time in seconds since epoch(`time.time()`). Returns generated ID.
- `compare_password(self, password)`:
 - Used to compare the sha512 hash value of input password with stored password which has already been hashed.

Item:

- The Items testing will ensure that the items submitted are valid items that fit into the specified categories and whether the item was sold or not.
- Methods:
 - `valid_string_type(self, string_input)`:
 - Checks if the input is of type string, if so it returns the input, otherwise it raises a type error.
 - `valid_float_type(self, float_input)`:
 - Checks if the input is of type float, if so it returns the input, otherwise it raises a type error.
 - `valid_user_type(self, user)`:
 - Checks if the input is of type User, if so it returns the input, otherwise it raises a type error.
 - `valid_string_length(self, string_input, min, max)`:
 - Checks if the input is of the valid length, if so it returns the input, otherwise it raises a value error.
 - `valid_size_value(self, size_input)`:
 - Checks if the input size attribute is of valid value, if so it returns the input, otherwise it raises a value error.

- `valid_gender_value(self, gender_input):`
 - Checks if the input gender attribute is of valid value, if so it returns the input, otherwise it raises a value error.
- `valid_price_value(self, price_input):`
 - Checks if the input price attribute is of valid value, if so it returns the input, otherwise it raises a value error.

Profile:

Class is in charge of managing and creating user profiles which contains their username, ratings, the amount of raters that have reviewed this user and the profile image URL. It also contains the items the user is currently selling

- Tests will show whether the shown rating score is appropriate.
- Tests will show whether the items on sale by that user are in fact theirs.
- Should not remove an item if it is owned by another user.
- Should not remove an item if it is not part of the user list of items.
- Should not add an item if it is owned by another user.

Methods:

`_Add_Item_to_Sell(self,item):`

- Private class in charge of adding items to list of items a seller is currently selling

`_Review_Score(self, new_review):`

- Private class in charge of updating the rating score of the seller when an item is bought

`_Remove_Item(self,item):`

- Private class in charge of removing items from the seller's list of items done when an item is bought and when the seller decides to take an item off the market

VI. Command line

greet() - Hello, Welcome to Borithrift, a centralized platform for boricuas to locally sell or buy their second-hand products.

Are you a returning user: Press 1 for yes and 2 to sign up:

>> 1

Username:

Password:

>> 2

Select a username:

(input a string)

Select a password:

(input a string)

Email:

(input a string)

buy_or_sell(user) - Press Buy to see and buy items on sale or Sell to exchange your products or Exit to exit:

>> Buy

Items on sale are:

1. -----<Black Running Jacket>-----
image url: ../images/running_jacket_black.png
price: 25.0
size: L
description: Basic T-shirt for everyday use
Sold by: josueestr 3.75 stars
2. -----<Spread Positive Energy Shirt>-----
image url: ../images/spreed_energy_tee.png
price: 15.0
size: L
description: Basic T-shirt for everyday use
Sold by: josueestr 3.75 stars
3. -----<White Tee>-----
image url: ../images/white_shirt.png
price: 10.0
size: S
description: Basic T-shirt for everyday use
Sold by: kevinlin 4.45 stars
4. -----<Green Running Jacket>-----
image url: ../images/running_jacket_green.png
price: 35.0
size: M
description: Basic T-shirt for everyday use
Sold by: kevinlin 4.45 stars

Select Item to Buy by its number on list:

>> (Input any number corresponding to an item)

Thank you for your purchase, please rate this user from 1 to 5:

>> (Input any number between 1 to 5)

Would you like to complete another action?

>> Yes

buy_or_sell(user)

>> No

(the program exits)

>> Sell

Your items are:

1. -----<Yosemite Tee>-----
image url: ../images/yosemite_tee.png
price: 15.0
size: L
description: Basic T-shirt for everyday use
2. -----<Japan Tee>-----
image url: ../images/japan_tee.png
price: 25.0
size: M
description: Basic T-shirt for everyday use
3. -----<Blue Shirt>-----
image url: ../images/blue_shirt.png
price: 10.0
size: S
description: Basic T-shirt for everyday use

Do you wish to add or remove an item?

Press 1 for Add 2 for Remove and 3 to exit:

>>2

Select Item to Remove by its number on list:

>>3

Your items are:

1. -----<Yosemite Tee>-----

image url: ../images/yosemite_tee.png

price: 15.0

size: L

description: Basic T-shirt for everyday use

2. -----<Japan Tee>-----

image url: ../images/japan_tee.png

price: 25.0

size: M

description: Basic T-shirt for everyday use

Press Buy to see and buy items on sale or Sell to exchange your products or Exit to exit:

>> Exit

(the program exits)
