Stuy N' Large Software Development Period 9 Edward Luo, Ryan Slu, Max Korsun, Andrew Wong Project Manager: Edward

# Stuy N' Buy

Stuy n' Buy is a website for members of the Stuyvesant community to buy and sell items they no longer need. Members will create accounts using their stuy.edu email and password. From there, members can list items for sale, accompanied by a picture, description, and price. They can also search for items and see if any relevant items are being sold, and if not, indicate items they are "looking for". A buyer and seller may contact each other to agree on a price and place for exchange. Stuy N' Buy is not responsible for any transactions that may or may not occur between a buyer and seller. We are also not responsible for emotional or physical damages incurred by meeting with super seniors or having a teacher spot you juuling.

#### **COMPONENTS**

#### Back end

- auth.py
  - Handles authentication (logging in, creating account, etc)
  - Make sure that user has a stuy.edu email
- main.py
  - Runs the application on localhost
  - Contains the views of the application
- api.py
  - Handles API usage and parsing JSON data
- client secret.json
  - Contains secret API information for the Gmail API.
- db.py
  - Contains methods to interact with the database, app.db

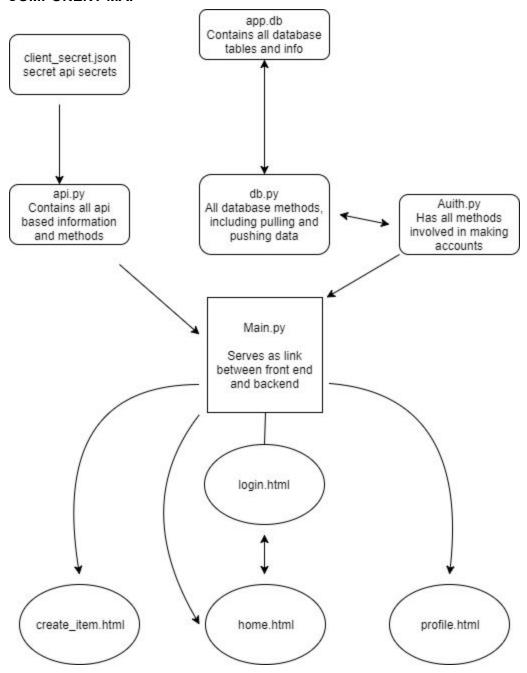
## Front end (UI)

- CSS styling: Foundation
  - Navbar and footer in the base
- Javascript
  - Listed items update automatically, refresh listings button (AJAX)

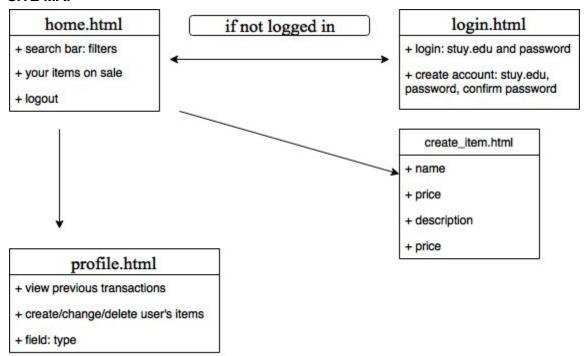
#### Views

- Login/create
- Index
  - Public: about the website, links to login/create
  - Logged in: listed items
    - Search and filters (price, alphabetical)
    - Link to create item
- View Item
  - Item price, seller, description, pictures, meetup button
  - Modal prompting for email message
- Create Item
  - Name, description, price
  - Upload pictures file form field and stored locally
- Profile
  - View user information
  - View user-created items and previous transactions
  - Links to delete, create, change status of user-owned items
- Admin interfaces
  - View, edit, delete (moderate) items
  - View, delete users

# **COMPONENT MAP**



# **SITE MAP**



#### **DB SCHEMA**

User

user\_id (unique identifier) | password (hashed) | admin | name | email (hashed)

user_id	password	admin	name	email
5	"df98fhsofj4ioc"	True		

#### Item

item\_id (unique identifier) | item\_name | price | description | status | is\_selling | user\_id

item_id	item_name	price	description	status	is_selling	user_id
1	"MetroCard"	39.40	"Sold"	2*	True	5
0	"Set of gym clothes"	10.29	"Want new"	1*	False	5
15	"iPhone"	650	"On sale"	0*	True	5

<sup>\*</sup> status: {0: up for sale, 1: meeting arranged, 2: completed}

#### Picture

picture\_id (unique identifier) | item\_id | path

picture_id	item_id	path
3	1	"/item_img/3.jpg"

#### **APIs**

### Description

- Gmail API https://developers.google.com/gmail/api/guides/
  - Used to send people emails alerting them of a sale of their item as well as details of the sale, like where to meet up and when.
- Imgur API <a href="https://apidocs.imgur.com/#4b8da0b3-3e73-13f0-d60b-2ff715e8394f">https://apidocs.imgur.com/#4b8da0b3-3e73-13f0-d60b-2ff715e8394f</a>
  - Alternate way of storing images to not take up space and have all account use the same photo base regardless of local copy, which would need to be updated.
     1250 uploads/ 12500 requests a day.

Usage (how we'll be using them)

We will be using the Gmail API to interact with the users of the website. When a buyer wants to buy something from a seller, the Gmail API will act as an intermediary, sending the seller an email message.

# PLAN

MVP

Task	Assigned To	
1451	Assigned 10	
Set up project directory	Ryan	
Login/create users  • Login and create views, templates  • Gmail API link to email  • Authentication methods  • DB methods	Andrew/Edward	
Foundation/CSS  • Base template	Ryan/Edward	
Homepage  • Public view + template  • Logged in view + template	Edward/Max	
Upload items  Upload view, template (form)  DB methods  Modify homepage to show uploaded items	Andrew	
<ul> <li>Purchasing process + meetup system</li> <li>Item-specific view, template</li> <li>Items listed in a page → click leads to the item page</li> <li>Item page: button for meetup request → modal for email message</li> <li>Message is sent via Gmail API to the seller</li> <li>Seller/buyer can mark an item as bought/found once the item is bought → archives it</li> </ul>	Ryan	
User Profile     Profile template, view     View user-created items and previous transactions     Links to delete, create, change status of user-owned items     User information	Max	

Search and Filter  Modify homepage to allow for search, filters  Modify user profile to allow for search	Ryan
Admin Interfaces	Edward

# Stretch

- Imgur API for storing pictures
- Rating system, view comments on profile (reviews for items sold, +rep)
- Editing items
- Bidding system (choose set price or bid)
- Maps of school, user can click on a spot on the map to indicate meetup location
  - o Choose in modal
- Online payment (Stripe API <a href="https://stripe.com/docs/api">https://stripe.com/docs/api</a>)
- Price check items (Amazon Product Advertising API -<a href="http://docs.aws.amazon.com/AWSECommerceService/latest/DG/EX\_RetrievingPriceInformation.html">http://docs.aws.amazon.com/AWSECommerceService/latest/DG/EX\_RetrievingPriceInformation.html</a>)