TEAM: BOOTSTRAP

FREE AND FOR SALE

Spring 2018

<u>Overview</u>

Being a college student, there is always a time when one needs to get rid of their previous course books or furniture and make money off of them. Most students would be aware of facebook groups for doing this. But what if someone in another college nearby gave you a better deal on that calculus textbook, or was offering a wooden shelf for free, or a table fan for rent? What if someone wasn't on facebook for some reason and had the desire to sell and buy products without burning a hole in his/her pocket? Keeping all this in mind, we came up with a common solution: A web app for Free and For sale for the 5 college consortium exclusively. It doesn't end there, it may not necessarily be a material object, could be tutoring sessions, dancing lessons, driving tutorials and so much more! The possibilities are endless!

Team Members

- Vedant Puri
- ❖ Yifan Zhu
- Shubham Mehta
- Sagar Thapar
- Zachary Kiihne

<u>GitHub Repository:</u>

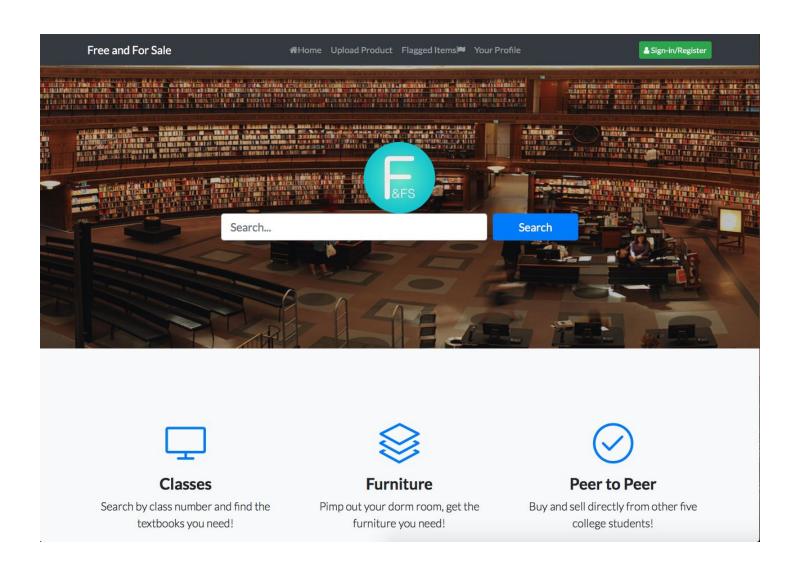
https://github.com/vedantpuri/ffs-web

<u>Note:</u> Please view the release notes(Releases section) in our repository before evaluating/testing our work.

The User Interface

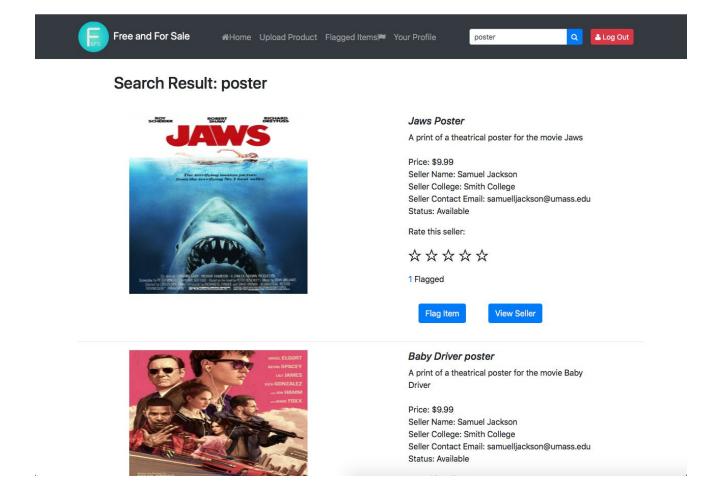
Landing Page

This is the first page the user sees when they go to our website. From here you can navigate to the rest of the site, login to your profile, or simply scroll down to look at what Free and For Sale has to offer. The top bar remains consistent throughout each view on the site.



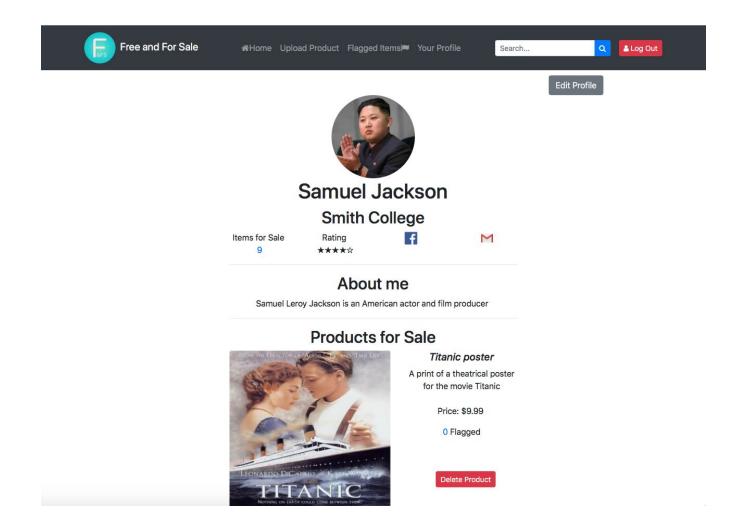
• Search Results View

When the user types in a query this is the page that comes up. This is the only view that doesn't require authentication, because we would like unregistered users to see what we have on sale. The site searches for products with that key word in the name and displays them in a list view. Basic information about each product is displayed, and the user can click on the seller to find out more information about them.



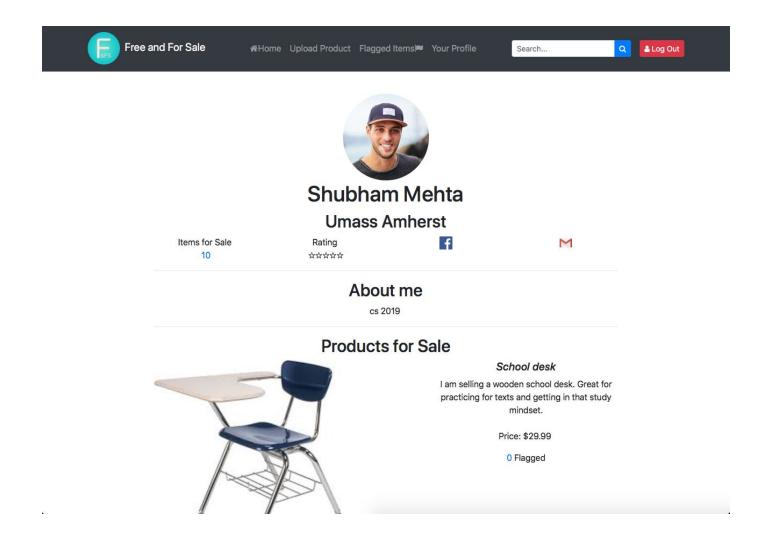
Your Profile View

Your profile is where you can see the information about yourself. It shows how many items you have for sale as well your star rating and displays all of your listings. It also displays contact options such as facebook profile/email



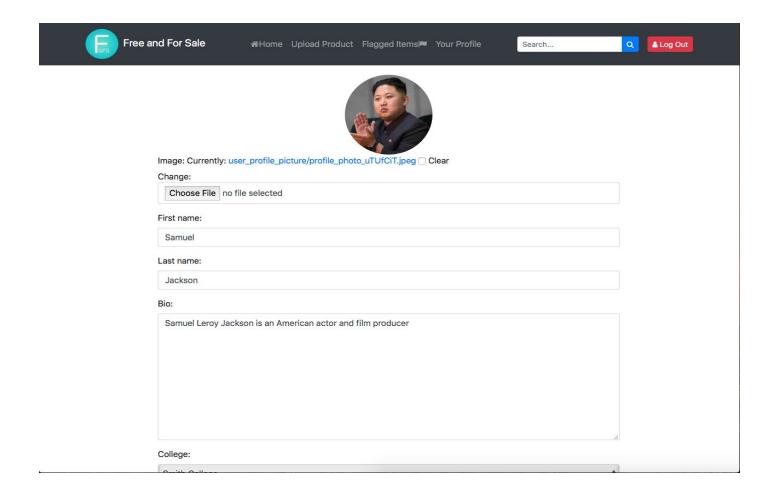
Seller Profile View

The seller view is similar to the profile view except that there is not edit profile button for obvious reasons. It shows how many items they have for sale as well their star rating and options to email them/ connect on facebook.



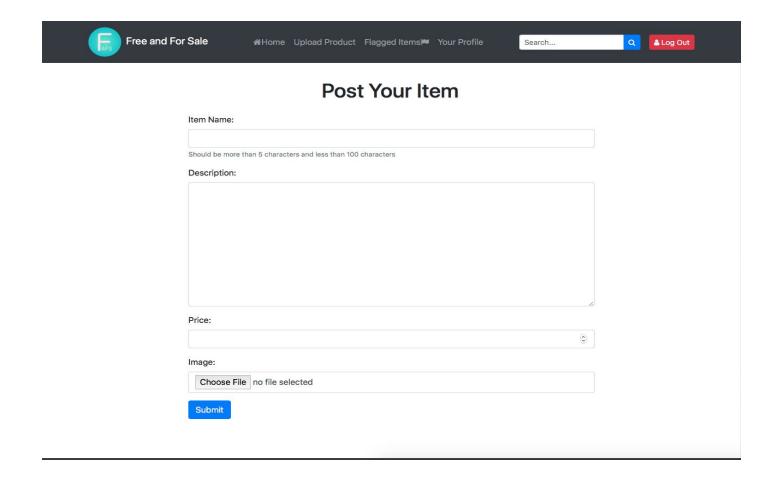
• Edit Profile view

To edit your profile you click the edit profile button from your profile page. This brings you to a form where you can edit your information such as change profile picture etc.



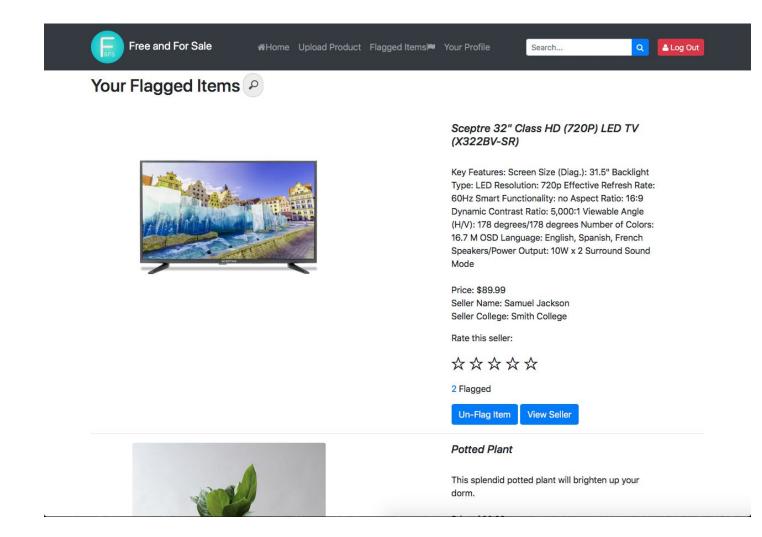
Upload Product View

The upload product button on the top bar brings you to this view, where you can add a new product for sale to the site. Each input box has some loose restrictions and a picture is required. Once you click submit a confirmation box pops up to ensure that you actually want to post your item.

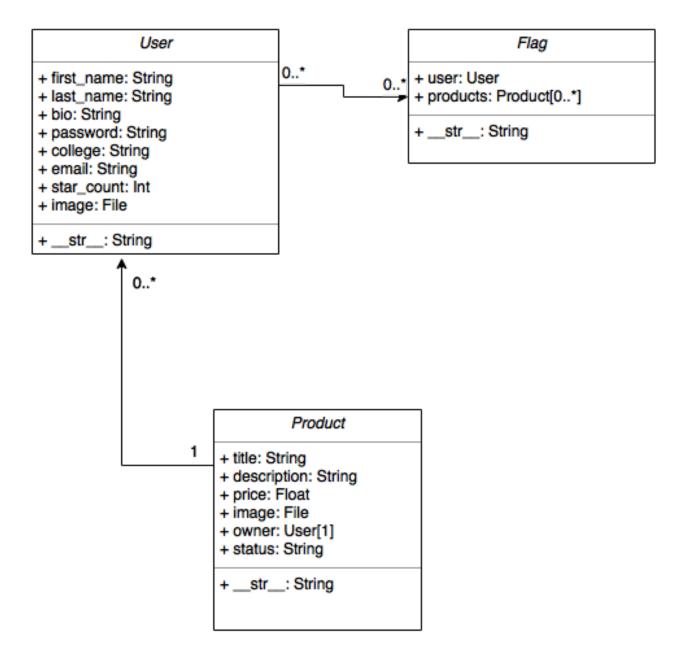


Flagged Items View

The flagged items button on the top bar of every page leads you to your flagged items. These are products that you have flagged to view later. They appear in chronological order from the top of the page. You can add items to this by clicking a flag item button in the Search Results View. You can unflag an item by clicking on the unflag item when it is in your flagged items.



Data Model



URL Routes/ Mappings

Route	Description	Authentication Required
http://127.0.0.1:8000/	This route takes a user to the landing page of the website.	NO
http://127.0.0.1:8000/user/	This route takes a user to the their profile.	YES
http://127.0.0.1:8000/flagged/	This route takes a user to their flagged items page.	YES
http://127.0.0.1:8000/flagged/r emove/	This route redirects a user to the flagged items page after Un-Flag button is clicked and the product is removed from their flagged items list	YES
http://127.0.0.1:8000/search/?	This route takes a user to the default search page without any query entered in the search bar.	ОО
http://127.0.0.1:8000/search/a dd/	This route redirects a user to their flagged items page after they flag an item from the search view.	YES
http://127.0.0.1:8000/upload/	This route takes a user to product upload page through which they can upload a new product.	YES
http://127.0.0.1:8000/edit_prof ile/	This route takes a user to their edit profile page through which they can make changes to their profile	YES
http://127.0.0.1:8000/accounts /login/	This route allows a returning user to login with their credentials, consisting of their email (username) and password. A successful login leads to redirection to the landing page	NO
http://127.0.0.1:8000/signup/	This route allows a new user to register with the website by providing the required details. A successful registration leads to redirection to the landing page.	NO

Authentication/Authorization

Our authentication is based on the standard username (email) and password verification, wherein a user must provide these credentials in order to become an authenticated user. Overall, our application provides the following: a homepage, search page, product upload page, flagged items view page, profile view page, edit profile page, login page and registration page. We allow any user, either logged in or not logged in, to access the homepage, search page, login page and registration page. However, the other pages and functionalities are only accessible to logged in users. Consequently, we have adjusted the views such that users who have not yet logged in only see a 'Login' button on the navbar and likewise, logged in users only see a 'Logout' button. Lastly, after logging out, the user is redirected back to the login page.

NOTE: The user 'compsci326' is an admin user and is solely for the purpose of accessing the Django Admin Site. No other user has this privilege. We have created a custom user for the purposes of testing. Here are the credentials:

Email: CS326TeamH **Password:** ffsweb12345

ALthough 'CS326TeamH' is not an actual email-id, we use it just for the purpose of testing. A new user with an actual email can be created easily via the registration page.

Team Choice

- Search: This is a feature so that the user can search for certain products and obtain results based on keyword matches.
- View Seller: A user can now view the seller from the product description.
- User registration: New users can register on our service on their own. It is a form with several fields corresponding to the details we need for a user profile. Specifically, they are: Email, First Name, Last Name, Bio, College, Image, and Password
- Delete item: This feature allows the user to delete a product that they had listed. Clicking the 'Delete Product' button will ask for confirmation prior to performing the deletion.

Conclusion

Overall, It has been a great learning experience to build this application. Our main motive was to create a standalone application that students can actually use to buy and sell items/ services. The experience of working as a team had several facets to it:

Learning Curve

- Authenticating users and assigning permissions to views
- Creating forms and extracting data from POST request
- Django Templates
- Model Design
- Making buttons interactive and mapping them to views/actions
- Modifying/ Deleting instances in the Database using the data from forms
- Git features such as cherry-pick and solving merge conflicts

Hurdles

- Dividing the tasks in a way to be able to develop concurrently
- Coordinating the data flow through various views of our application
- Uploading files via forms, saving them and displaying them in appropriate views
- Maintaining uniform style throughout

- Caching interfering with debugging
- Issues using git
- Managing the database on github

Something we would have loved to have known earlier would be more information on the User model and information about best ways to extend it and integrate it to suit the needs of our application. Also, knowing the issues that can occur with having a single db.sqlite3 file would have saved us ample time as well. Nonetheless, the development process was conducive to our learning and in the future, these experiences would help us be better developers.

Single Slide

The single slide powerpoint is included in the writeups folder on github.

