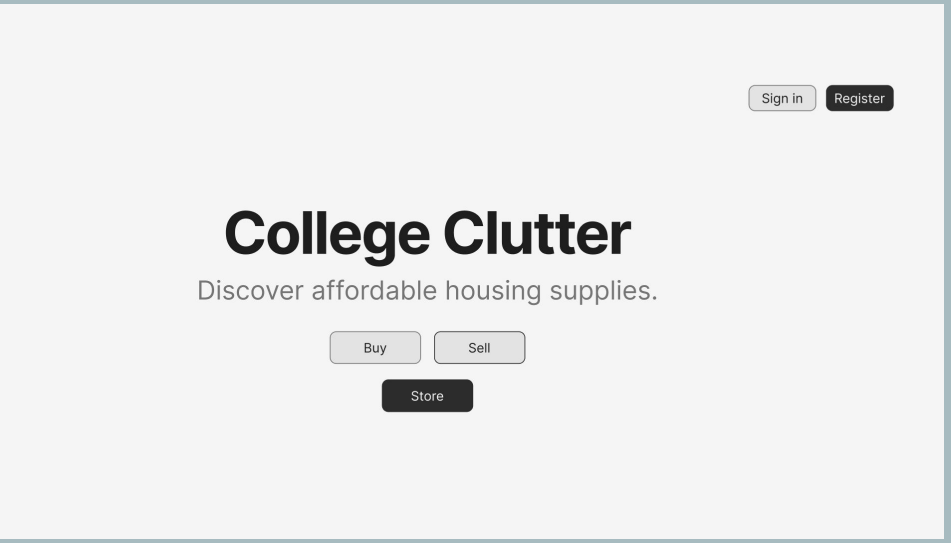
College Clutter



By:
Brandon Byrne
Sargam Nohria
Simran Lekhwani
(GROUP 36)

Milestone #4

CS 326 SPRING 2025

The project's vision.

Project's name: College Clutter
Description: Every year students buy new furniture every year to offset costs of storage and leading to tons of waste at the end of every semester. College Clutter is a website designed to connect students to other students and local storage facilities to collectively create optimal storage/selling opportunities. Waste and cost of living are both increasing at remarkable rate for students at Amherst. By offering a reasonable storage option we can give students an option to reduce costs between semesters and save on massive waste while improving local business outcomes during the down season.
Key functionalities: The website will be a lightweight platform that will use collective data from user inputs to generate optimal storage options with other users and local storage facilities. The user will have a simple drop-down interface to use commonplace data on furniture sets for ease of use and fast adoption. Users can list housing items for sale, buy items, or find storage for their items using the simple interface.

Tagged repository: https://github.com/umass-byrneb/CS326-Group-36
Milestone: #4
Issues on GitHub: https://github.com/umass-byrneb/CS326-Group-36/issues

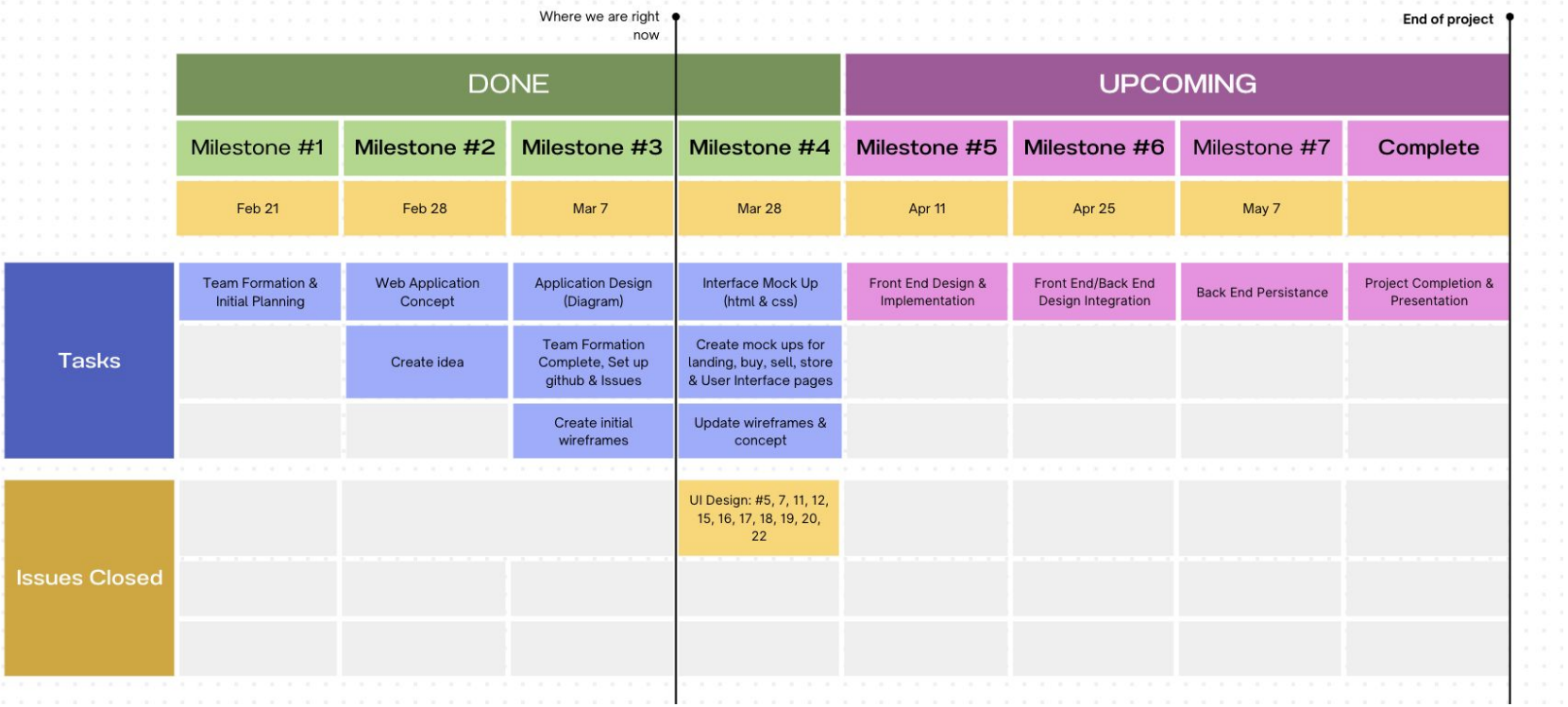
The builders.

Brandon Byrne
Senior Computer Science Major | bbyrne@umass.edu
Background knowledge: C,C++, Python, Java, js and React
Other Interests: Hiking(46er) with my dogs 🚶🐕🐕
Reflection: I believe in this website as I personally have had these problems in the past and think it would improve student life at the end/beginning of the semester and decrease waste on campus
Role: backend development, front end development

Sargam Nohria
Senior Computer Science & Anthropology Major | snohria@umass.edu
Background knowledge: C, Python, Java, HTML, CSS
Other Interests: running, rock climbing, baking
Reflection: I am interested in increasing students' accessibility to affordable housing items and a more efficient exchange of existing resources. I believe this website will help people live well.
Role: wireframes/UI, front end developer

Simran Lekhwani
Senior Computer Science Major | slekhwani@umass.edu
Background Knowledge: C, C++, Python, Java, Go, JS, SQL
Other Interests: Dancing, Rock climbing, Reading
Reflection: As a student who has lived off campus and is graduating as well, this application would be very helpful to reduce some stress associated with moving and relocating by introducing a platform that allows one to communicate with other individuals who are interested in selling or buying furniture.
Role: Backend development, front-end development

Historical timeline.



Brandon Byrne

Assigned Work Summary

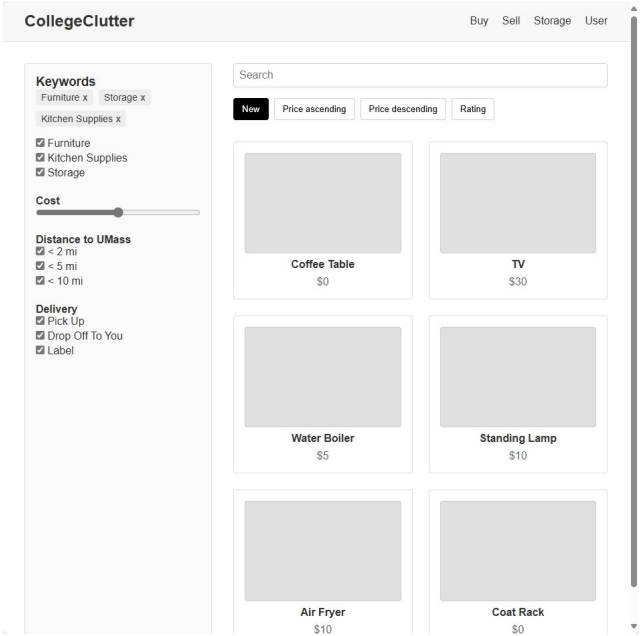
Assigned Issues: #7 (landing page), #11 (buy page), #15 (storage button), #16 (size input), #17 (save button), #18 (buy button)
Commits: pages.css, layout.css, main.css landing page html, buy page html, sell page html

Tasks completed: Implementing html/css for the pages listed in assigned issues. Aided wireframe creation of user interface page.

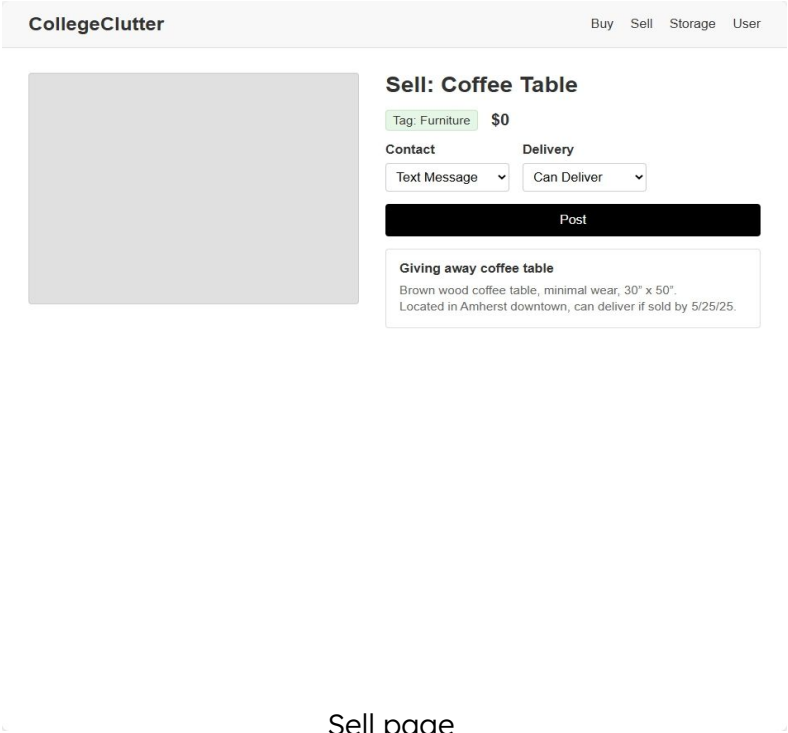
- Links to PRs closed on GitHub:
- https://github.com/umass-byrneb/CS326-Group-36/pull/21
- https://github.com/umass-byrneb/CS326-Group-36/pull/23

Brandon Byrne

Screenshots and demonstration



Buy page



Sell page

Brandon Byrne

Code & UI explanation

https://github.com/umass-byrneb/CS326-Group-36/tree/main/frontend/css

-The CSS is split into three layers main.css (global resets and typography), layout.css (structural elements like the navbar, flex containers, grids), and pages.css (page-specific adjustments such as the hero section and form layouts). This modular approach ensures that each HTML file can include the same styles for consistency while also having room for unique customizations. Common UI components are reused across pages. This promotes consistency and makes maintenance easier since changes in one component update across the site. By using modern CSS techniques, the code integrates well into a responsive design strategy, ensuring that the layout adjusts based on the user's device or window size.

-One challenge was aligning elements (for example, ensuring the "My Items" heading on the user page lined up with the CollegeClutter logo in the navbar). The solution involved carefully matching padding and margin values like setting .section-title { margin: 1rem 2rem; }) to achieve alignment.

Brandon Byrne

Challenges and Insights

-Regular code reviews and clear communication about changes through pull requests and commit messages greatly improved the project's quality and consistency. Breaking the project into smaller, modular parts like separate HTML pages and distinct CSS files allowed team members to work independently without conflicts. Collaborating on technical challenges such as deploying with GitHub issues taught me to adapt quickly and seek feedback from teammates, ultimately leading to better, more robust solutions.

Brandon Byrne

Future improvements & next steps

CSS Optimization:
The current CSS could benefit from further optimization. Using CSS preprocessors and variables for repeated values would make future changes easier and reduce redundancy.
https://github.com/umass-byrneb/CS326-Group-36/issues/33

Interactivity Enhancements:
The interactive elements are currently static. Refactoring and modularizing the JavaScript for these interactions would improve the overall user experience.
https://github.com/umass-byrneb/CS326-Group-36/issues/34

Build and Deployment Process:
Finish connecting the buttons and pages within the website
https://github.com/umass-byrneb/CS326-Group-36/issues/32

Sargam Nohria

Assigned Work Summary

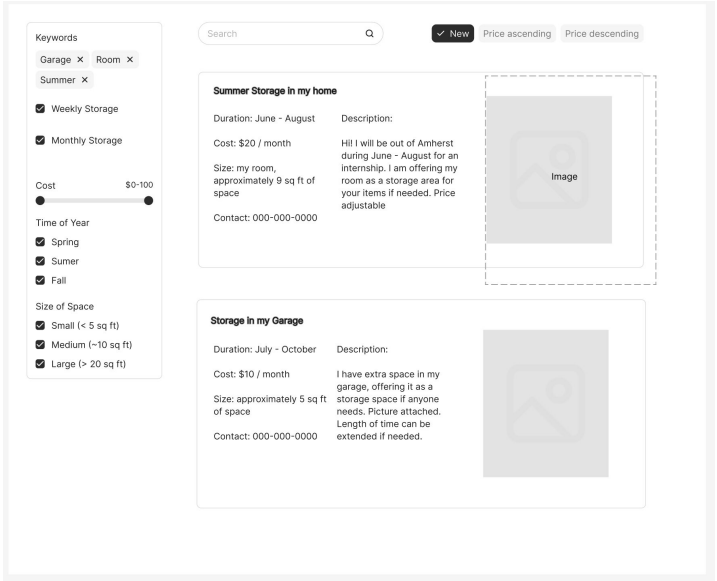
Assigned Issues: #12 (sell page), #19 (user interface page), #20 (storage page)
Commits: sell page html, user interface page html, storage page html

Tasks completed: creating updated wireframes for storage pages, user interface page, and landing page. implementing html for the pages listed in assigned issues.

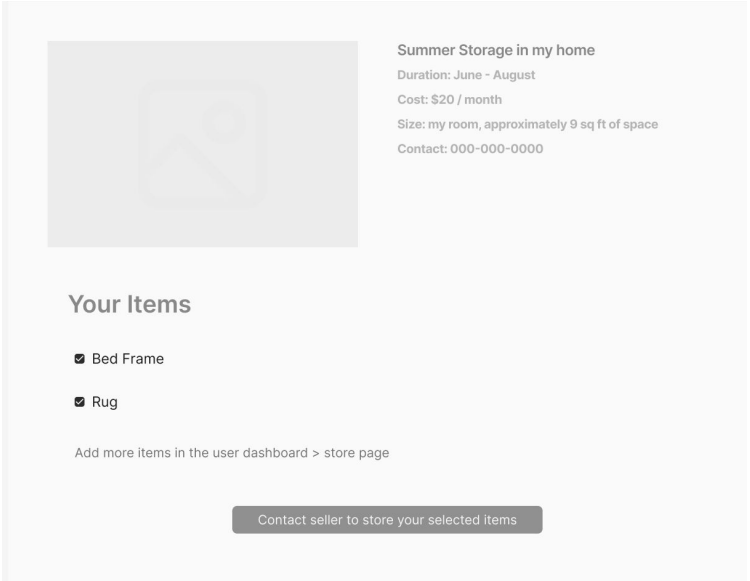
- Links to PRs closed on GitHub:
- https://github.com/umass-byrneb/CS326-Group-36/pull/27
- https://github.com/umass-byrneb/CS326-Group-36/pull/29

Sargam Nohria

Screenshots & Demonstration (Figma wireframes)



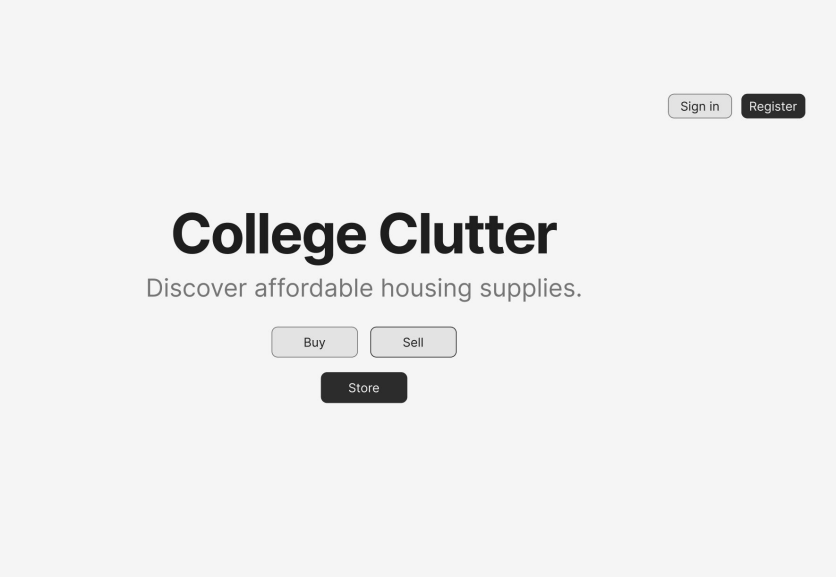
Storage Page 1



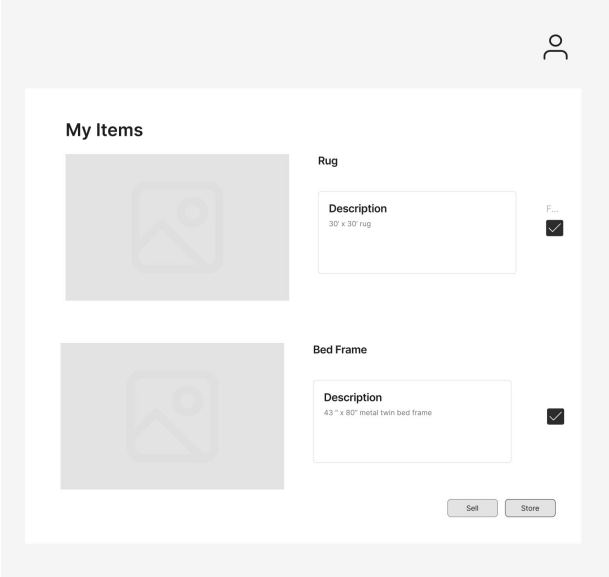
Storage Page 2

Sargam Nohria

Screenshots & Demonstration



Updated Landing Page



User Dashboard Page (aided by Brandon)

Sargam Nohria

Code and UI explanation

https://github.com/umass-byrneb/CS326-Group-36/blob/main/frontend/storage.html

I designed the sidebar to include keyword tags, a cost slider, and checkbox groups for filtering by time of year and size of space. This setup lets users quickly refine storage options based on their needs.
Using Flexbox for the overall layout ensures that the sidebar and main content adjust gracefully on various screen sizes. This consistency makes the storage page user-friendly on both desktops and mobile devices. I ensured that each storage listing is clearly delineated with borders, padding, and consistent typography. This helps users easily read details like cost, duration, and size for each storage option.

Achieving a consistent, responsive layout for both the filtering sidebar and the storage listings was challenging. I addressed this by leveraging Flexbox to create flexible containers and by carefully adjusting margins and paddings.

Sargam Nohria

Challenges and Insights

- Figuring out the feasibility of and the method for offering storage options: deciding between connecting to a third part storage facility or having local students offer their own space. Weighing factors of accessibility, social benefit, cost, and ease - ultimately decided to have students offer their space.
- Still new to GitHub and figuring out how to merge/push/pull. I drew on Brandon's experience to help figure it out.

Sargam Nohria

Future improvements & next steps

- Login authentication
  - https://github.com/umass-byrneb/CS326-Group-36/issues/13
- Creating a “my account” drop down when a user hovers over the login/user icon where users can click a ‘log out’ button
  - https://github.com/umass-byrneb/CS326-Group-36/issues/24
- Implement storage 2 page
  - https://github.com/umass-byrneb/CS326-Group-36/issues/28

Simran Lekhwani

Assigned Work Summary

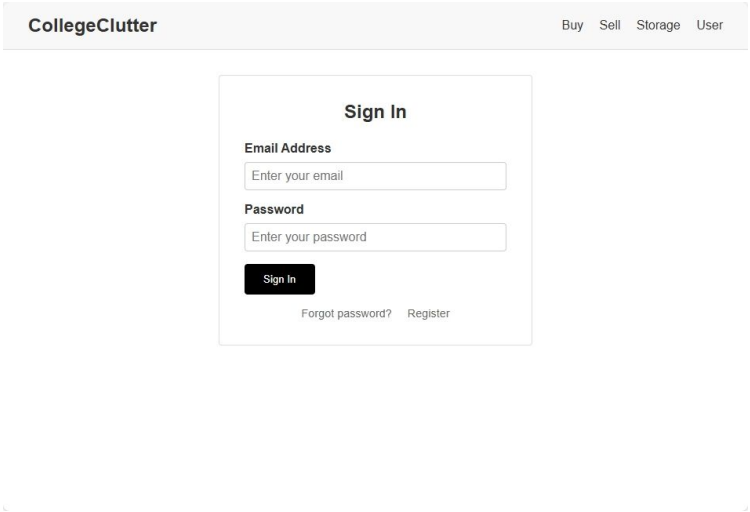
Assigned Issues: #22 (login page), #25 (registration page)
Commits: login page html, registration page html, updates to Team Design and README.md

Tasks completed: Implemented the html layout for the login page and registration page. Worked on some requirements from the previous milestone (such as README and team roles) to get caught up with the team.

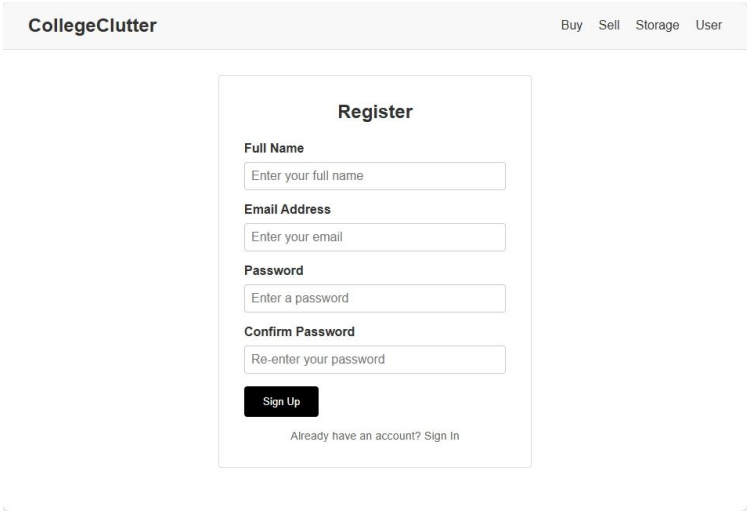
- Links to PRs closed on GitHub: https://github.com/umass-byrneb/CS326-Group-36/pull/31

Simran Lekhwani

Screenshots and demonstration



Login Page



Registration Page

Simran Lekhwani

Code & UI explanation

https://github.com/umass-byrneb/CS326-Group-36/blob/main/frontend/register.html

I designed the registration page to present a simple, uncluttered form with clear labels and inputs. The form is centered within a container that uses ample padding and border styling for emphasis, ensuring users can quickly identify where to enter their details. I maintained consistency with the overall UI by using the same navbar (with Buy, Sell, Storage, and User links) and styling conventions (colors, fonts, and button styles) as on other pages. This helps create a uniform experience across the website.

A challenge was ensuring that the form elements were evenly spaced and aligned. I addressed this by using consistent margin and padding values within the .form-group and the container, resulting in a neat and readable form.

Simran Lekhwani

Challenges and Insights

- Since I recently joined the team (after Milestone 3), I had some catching up to do to understand the team's idea, the wireframes, and the code base already established, as well as making sure some of the requirements from Milestone 3 are met for my new team. This did affect the amount of contributions I could make during this milestone.
- Understanding how the CSS was broken down added insight into how it helped ensure visual consistency across all pages in the application
- Collaborating through Github and makings PRs has been helpful in my opinion to get feedback on the work done and how it can be further improved

Simran Lekhwani

Future improvements & next steps

Database/Backend functionality:
https://github.com/umass-byrneb/CS326-Group-36/issues/36

- Look into a feasible storage architecture
- Create a database for users (to later allow authentication functionality)
- Create a database to store the user input from storage page

Customized User page:
https://github.com/umass-byrneb/CS326-Group-36/issues/35

- Once the user logins, they will be able to see the items they have saved/purchased - create a general view/idea of all the features that need to be placed in the customized user landing page
- Help create the UI and HTML/CSS for this page

Interactivity on login and registration page (if possible):

- Prefilled input or suggestions for input as user types