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Science Equipment Catalogue

WAMA Final Project

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Product Overview

Product Goals

- Our product is a catalogue of various science tools and equipment
- Hope for it to be used by the LASA science wing to keep track of items
- Since it will likely only be used by science teachers, we value function over fashion

Product Features

- Displays all of the equipment in the database
- Also displays the item's location, quantity, description, and when it was last updated
- Teachers are able to edit or add items

Tools and Libraries

- HTML
- CSS
- Python
- FLASK
- SQL

2.1

Empathize

Interview

- Wanted to help the LASA science wing
- Found there was an issue keeping track of shared resources in the science wing
- Proposed an application that would help all of the teachers keep track of these items
- Helped us realize the best software features to help them

Who should be able to use the products as well as edit it?

What information is important that you know about the equipment?

When could this be used?(How often would it be used by teachers and others, What are good situations for that)

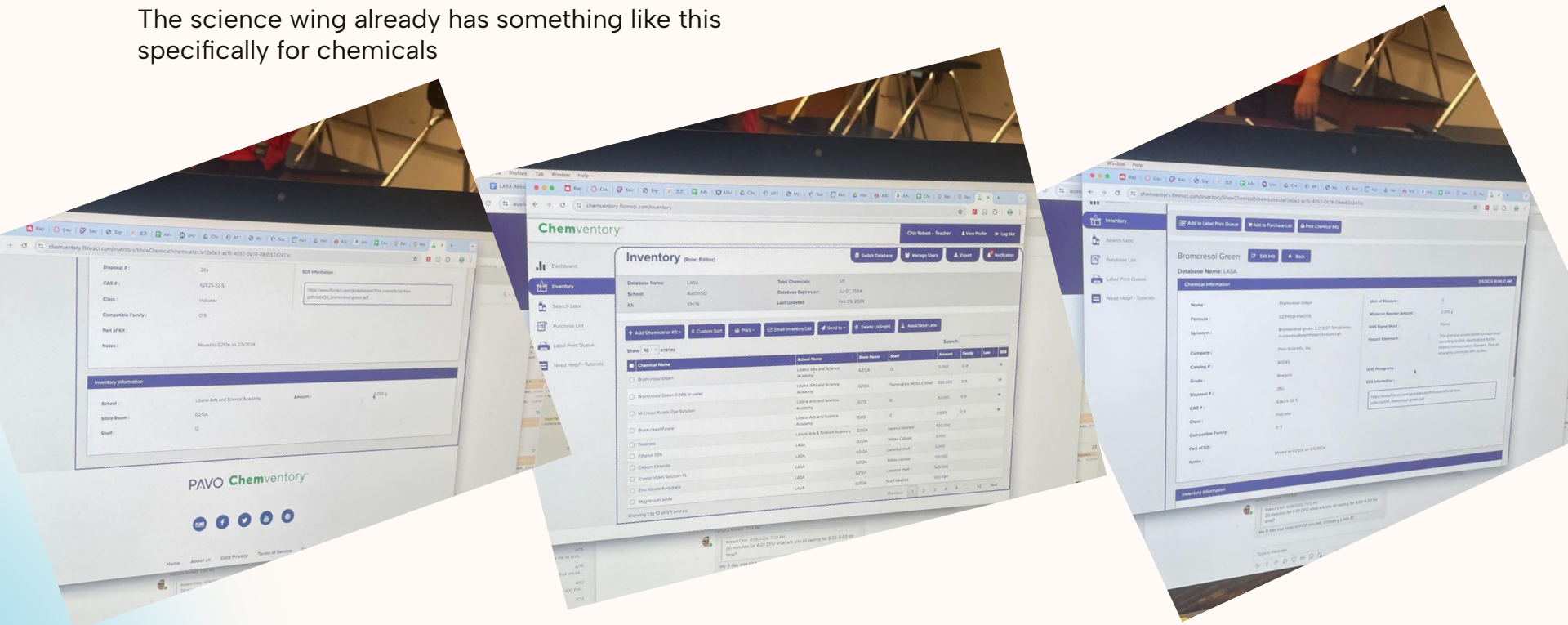
Where should you be able to access the service?

Why would this be helpful for teachers and students and how could we make it more helpful?

How should we update the initial list of equipment and continue to keep it up to date?

Similar Software

The science wing already has something like this specifically for chemicals



2.2

Define

Problem

Problem statement:

- LASA science teachers need to easily keep track of their resources to operate at their best

Created a user journey to best understand their process when finding items

User Journeys

Realize they need an item	Check their classroom or nearby storage rooms for the items	Ask other teachers for the items	Other teachers look for the item	Teacher has to go pick up the item	Teacher then places items in a convenient but disorganized location
					
	Can take a long amount of time Lab equipment is very disorganized	Relies on the willingness and availability of others	Can interrupt other teachers' days		Creates cycle of disorganization

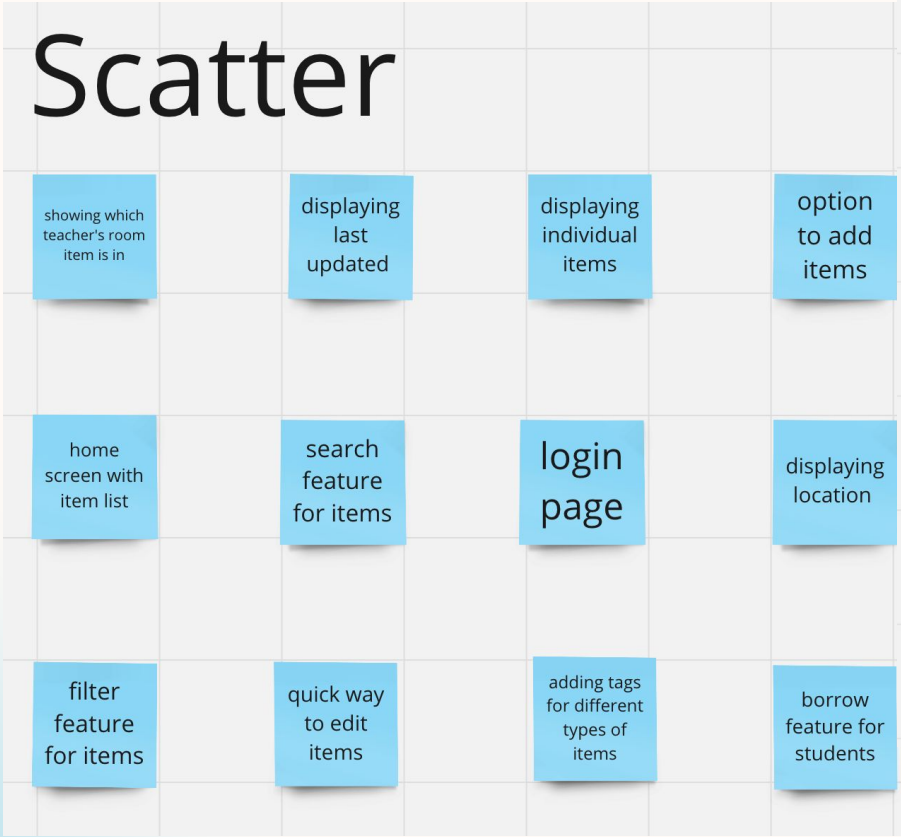
2.3

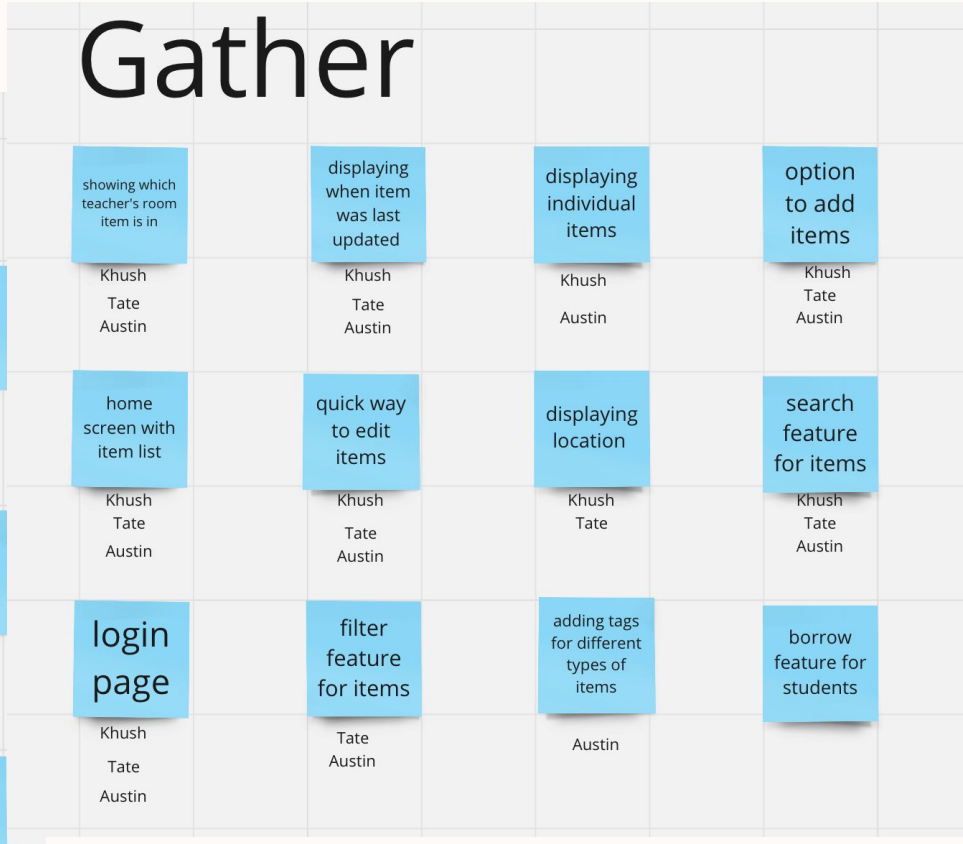
Ideate

Scatter and Gather

- Used Miro
- Miro
  - Digital collaboration platform
  - Works great for online collaboration
- Helped us easily find what features we all agree should be a part of the application

User Flows


Scatter
showing which teacher's room item is in
displaying last updated
displaying individual items
option to add items
home screen with item list
search feature for items
login page
displaying location
filter feature for items
quick way to edit items
adding tags for different types of items
borrow feature for students


Gather
showing which teacher's room item is in
Khush
Tate
Austin
displaying when item was last updated
Khush
Tate
Austin
displaying individual items
Khush
Austin
option to add items
Khush
Tate
Austin
home screen with item list
Khush
Tate
Austin
quick way to edit items
Khush
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displaying location
Khush
Tate
search feature for items
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Austin
login page
Khush
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Austin
filter feature for items
Tate
Austin
adding tags for different types of items
Austin
borrow feature for students

2.4

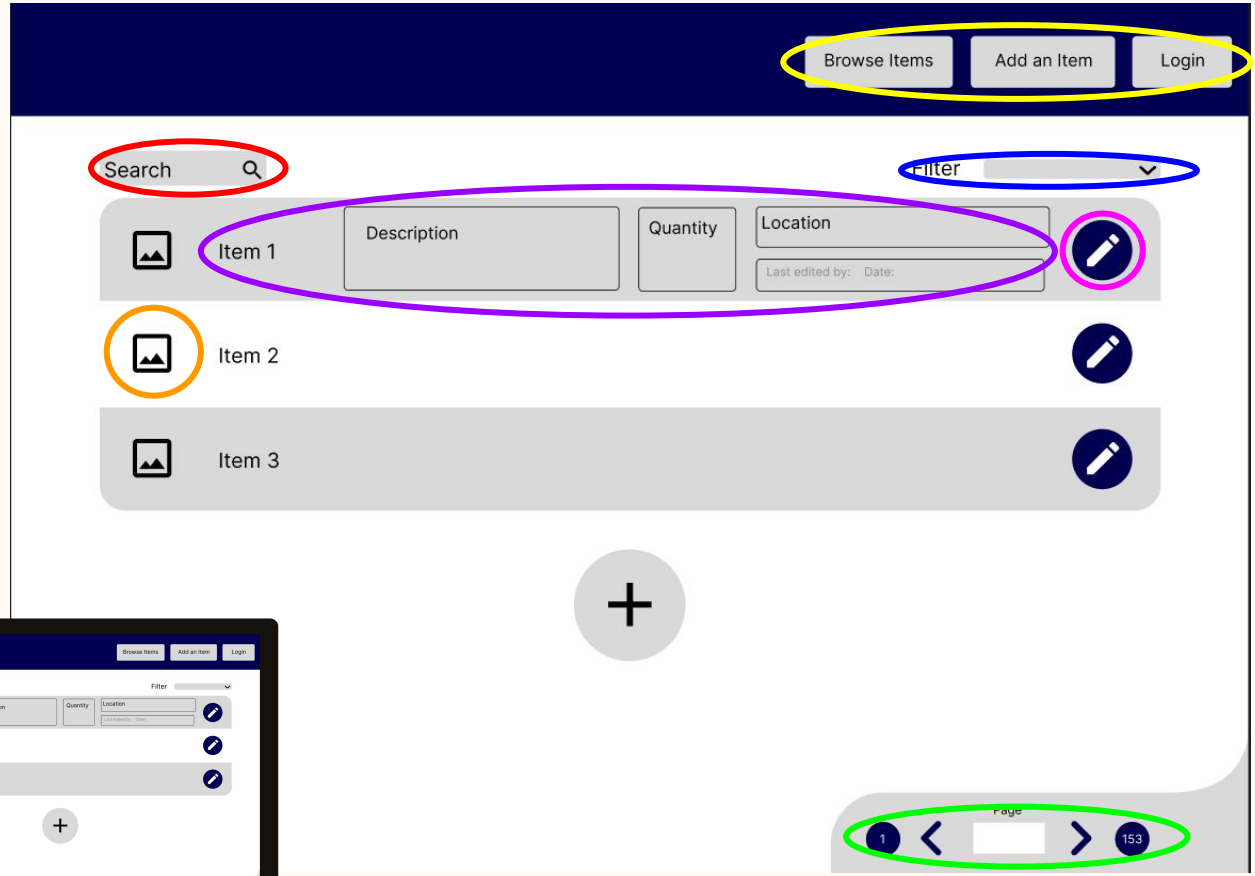
Prototype

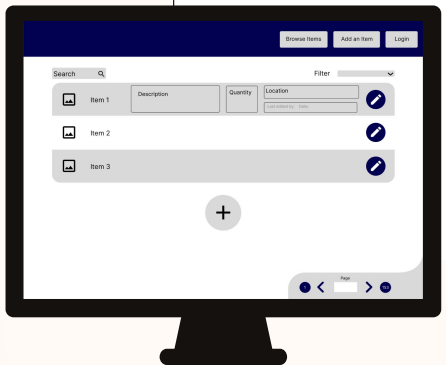
Figma

- Decided to use Figma to prototype our graphic design and UX/UI
- Figma would be the best way to display what we wanted and how it would look
- Also used Figma to layout the flow of our website
- Allowed us to fully plan out the visuals of our website and come across things we haven't considered before

Home Mockup

- Search function
- Information display
- Filter function
- Item icon
- Page navigation
- Application navigation
- Edit item





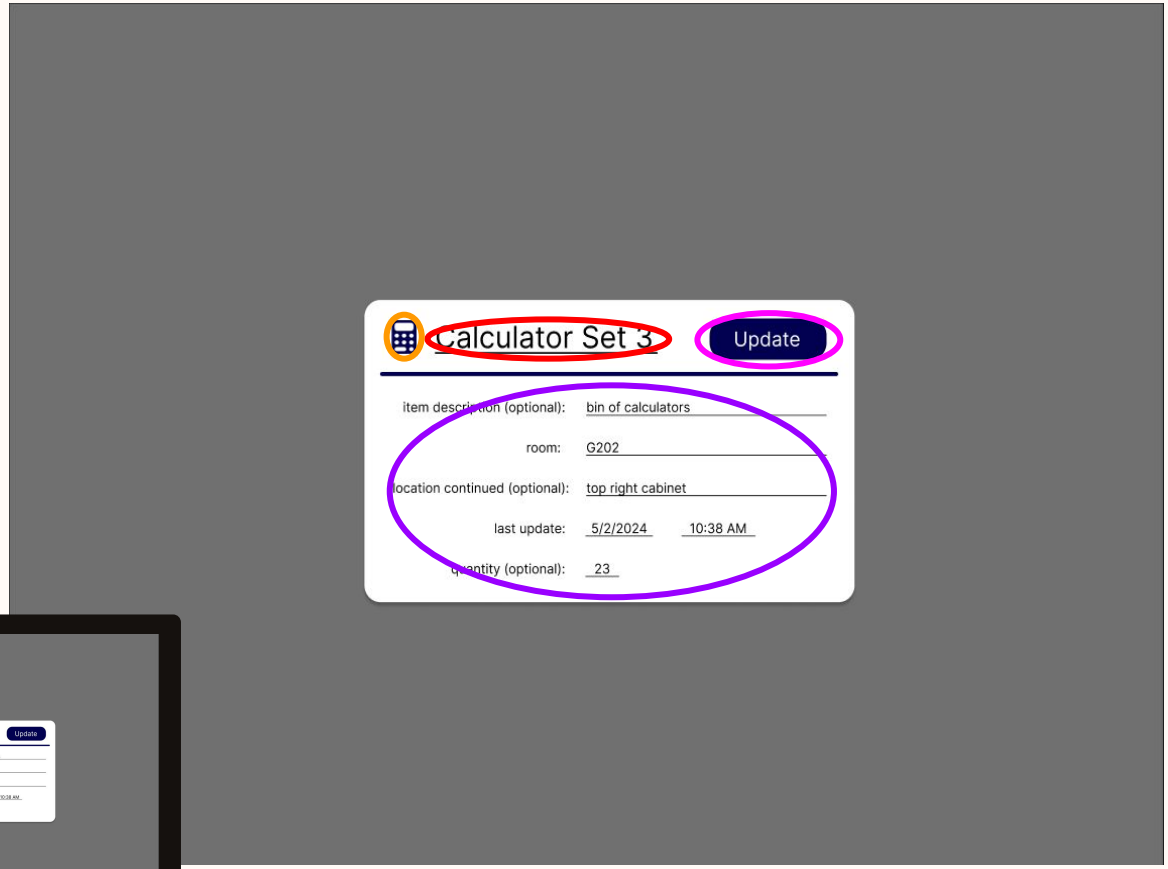
Edit Page Mockup

A Title

Information display

Item icon

Update item



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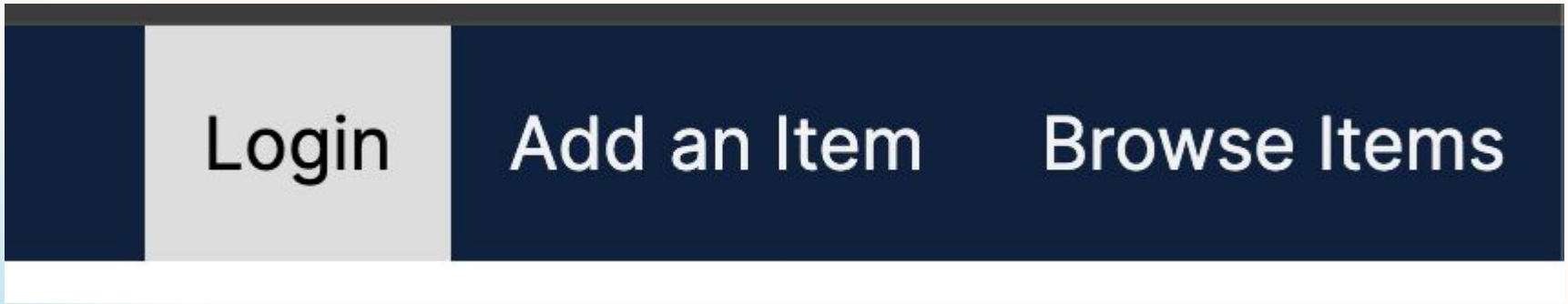
Test / Final Results

Testing

- We tested our prototype with our teacher(Dr. Chin)
- The feedback included implementing some of our ideate ideas including
  - Login Page
  - Search Feature



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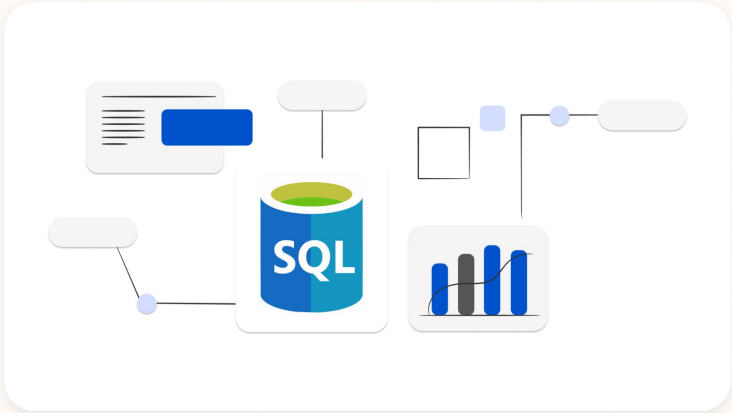
Retrospective

Retrospective



Challenges

- Our biggest challenge was **TIME**
- Communication during AP Tests and missing class
- Collaboration through Github and VSCode and Replit

What strategies worked well

- Dividing up work by files in the program
- Creating tasks in terms of functions needed

What strategies did not work

- We had to figure out a new system for databases as SQLite would not be able to update the database when the website was run online

Burndown Chart

Week 1

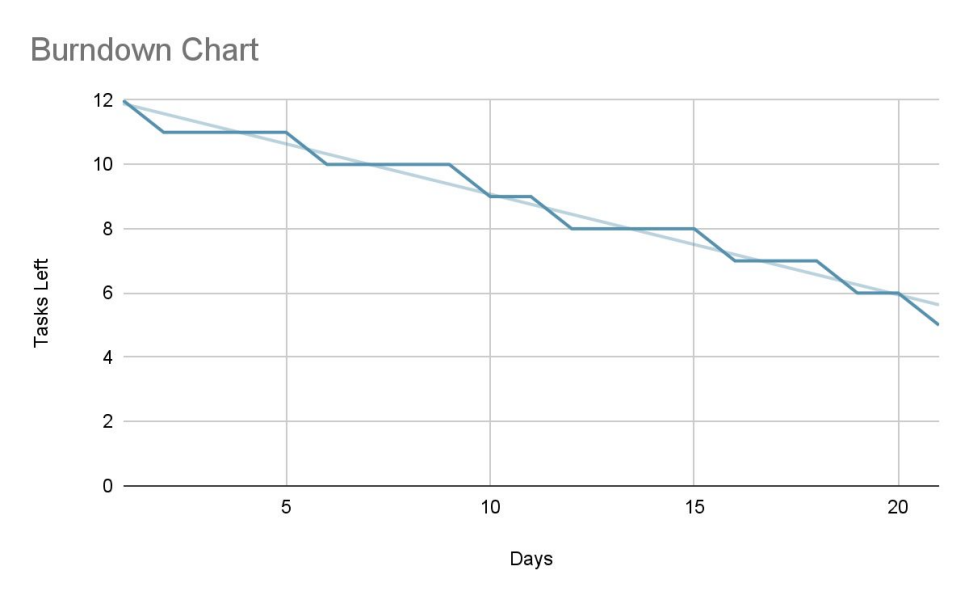
- Brainstormed ideas for project
- Interviewed teachers and students
- Decided on project idea
- Create foundation for project

Week 2

- Finalized individual tasks for project
- Created basic flask template
- Implemented a dynamic database

Week 3

- Made edit/add functionality
- Created a home bar
- Polished CSS for all pages



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Next Steps

Next Steps

- We achieved our minimum viable product

- To improve our product we will implement
  - Login page for teachers
  - Method to borrow items
  - Search and filter features for ease of use

- We would achieve this goal in 3 weeks according to our burndown rate

Joke

How is a user interface like a joke?

If you have to explain it, then it's not good.

End/Questions?