

# Team Description

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## Summary of Technical Strengths

Devin: A senior at Grand Valley State University studying computer science with a focus in web development. Has a strong fundamental understanding of web technologies such as HTML, CSS, Tailwind, Bootstrap, JavaScript, Git, NodeJS, PHP, as well as familiar with modern frameworks like React, and Vue.

Kit: Kit is a senior at Grand Valley State University majoring in Computer Science and minoring in English. She is interested in working in software consultation. She is currently studying AI development. Kit has completed small projects in Mobile Development using Swift, Kotlin, Unity, and Firebase. She has also studied Java, Python, HTML, CSS, SQL, C, and C#.

Lauren: Lauren is a computer science major looking to pursue software development opportunities after graduation. Lauren spent her internship working for Industrial Service Technologies to update and migrate their Boardware to a newer, more updated platform. This was accomplished by using .NET for the backend and Angular for the frontend. She gained experience working with both frontend and backend development throughout that project. Lauren's coursework at GVSU has made her proficient in Java, Python, C/C++, HTML, CSS, JavaScript, VueJS, React, Bootstrap, and SQL.

## Anticipation of Growth Areas

Devin: I anticipate learning more about Firebase and backend development to aid my career goal of becoming a full stack developer. Not only this, but I want to also learn more about API's and integrating them into an application. This will allow me to hone my skills to provide more value for future clients.

Kit: Kit anticipates needing to do more research on AI generated recommendations that are currently used in stores. She also will be learning more about back end web development and API calls. She is looking forward to expanding her knowledge of firebase as well as front end web development.

Lauren: Lauren anticipates learning about Tailwind, she has never used it before but thinks it looks like a seamless tool for web development and will create an aesthetically pleasing front end for the project. She will also be diving more in depth when it comes to Firebase as far as

how to store data. She has worked with Firebase before but never to the point where the user accounts can message each other or where user accounts receive notifications from the system. She's looking forward to enhancing her knowledge on those frontend and backend aspects.

## Project Description

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### Background

As an avid reader, it can be a pricey hobby always purchasing your books; and library hold lists can be long. We're looking to give readers another option that provides them to expand their library at a lower cost. We plan to create a platform where users can upload their current library of unwanted books in order to exchange them for new books using the platform.

### Description of Intended Features/Backlog

#### Home Page

- Feature: Search Bar
  - Queries available books to swap based on title / author
  - Gives a grid of recommended products w/ product detail page
  - Displays recommended titles

#### Likes Page

- The Likes Page is a grid of all books that a user has liked w/ a product card (image and title)

## Library Page

- Library page is a grid of books you have listed for swap
  - Likes Counter feature
  - View Counter feature

## Message Page

- The message page is a collection of all communications sent to the user
- Separated into notifications that are sent from the server and messages that are sent from user to user
- Notifications include likes, follows, and swap prompts
- Messages are intended to ask for more information, and communications are disabled once the relevant book swap is completed

## Account Page

- The account page is where the user can view info such as:
  - How many people they are following their library
  - How many people are following their library
  - The number of swap credits they have
  - Their reviews from other users
  - Settings
  - A help center
    - FAQ's
    - Contact form
  - Swap history
    - Separated into incoming and outgoing
    - Incoming provides the tracking number provided by the sender

## Credit System Feature

- A credit is earned by sending a book out to somebody

- The credit is specifically earned when a valid tracking number is given
- A single book is always worth 1 credit
  - Boxed sets earn credits equal to the number of books

#### Book detail page

- Contains at least one user generated picture
- Details include title, author, condition, genre, category, age group, description, and summary
- Has a report button for misrepresentation or other issues such as inappropriate language or content
- Links to the seller's profile page
- Links to a seller message

#### Checkout "bookbag" page

- Bag is emptied when user leaves the website/goes inactive
- Set up like a typical store checkout

## **Anticipated Platform / Tooling**

Firestore  
Tailwind

## **Relevant Ethical Principles**

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### Ethical Considerations

From the Software Engineering Code of Ethics and Professional Practice, we find the following principles particularly relevant:

1. Accept full responsibility for their own work.

2. Moderate the interests of the software engineer, the employer, the client, and the users with the public good.
3. Maintain integrity and independence in professional judgment.
4. Advance the integrity and reputation of the profession.
5. Improve their ability to produce safe, reliable, and useful quality software.
6. Be fair and avoid deception.
7. Recognize and respect all forms of property.
8. Treat all forms of software maintenance with the same professionalism as new development.