Project Description

Thriftee is a transformative solution designed to modernize thrift store operations by providing an exclusive online platform. This user-friendly application aims to bridge the gap between thrift store owners and a larger, digital-savvy customer base. By leveraging features such as home, profile, shops, categorization, search filters, notifications, and place order, Thriftee enhances the shopping experience for customers and streamlines the sales process for store owners. The project focuses on addressing the limitations of relying solely on social media for marketing and sales, thereby boosting visibility and profitability for thrift stores.

Requirements Summary

MINIMUM REQUIREMENTS	Processor Cores	Single Core
	OS	Apple iOS 10 & Android 5.0
	RAM	2 GB
RECOMMENDED REQUIREMENTS	Processor Cores	Multi Core
	OS	Apple iOS 12 & Android 8.0
	RAM	4 GB
OTHER REQUIREMENTS	Permissions	Notifications and Storage

Table 1: System Requirements

The minimum requirement processor core for the application will be a single core to cater to low-end devices, ensuring compatibility with older devices. The application will support Apple iOS 10 and Android 5.0, which are older operating systems that are still widely used, particularly among low-end devices.

Prototype Description

The Thriftee prototype showcases the application's main features and user flow. It includes a welcome screen with the Thriftee logo and slogan, a sign-up or log-in screen for account management, and a home screen that serves as the central hub for navigation. Users can access their profile, search for products, view reviews, and add items to their cart. The prototype demonstrates the seamless transition between browsing, selecting, and purchasing

products, emphasizing user-friendly design and intuitive navigation to enhance the overall shopping experience.

Thriftee Figma Link:

https://www.figma.com/proto/2S3UcOTFv2xWXNSWb30lic/HCI?node-id=0-1&t=QypjnC4 vzKWdWfNp-1

User Scenario

Katie, a thrift store owner struggling to attract customers beyond her local community. By using Thriftee, Katie can easily upload her unique and vintage items, categorizing them for better visibility. Potential customers, like John and Jamie, can use search filters to find exactly what they need, secure in the knowledge that their payments are safe. The platform's personalized recommendations keep users engaged, increasing the likelihood of repeat visits and sales. Thriftee helps Katie reach a wider audience, boosting her store's visibility and sales without relying solely on social media.
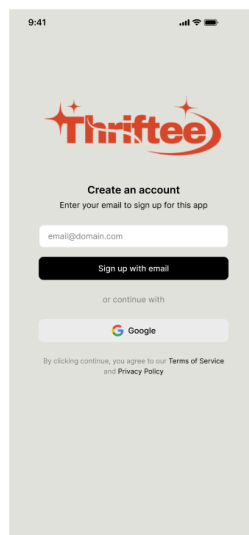
Mock up / Prototype

The Thriftee mock-up features an iPhone-style GUI with a clean, visually appealing interface. The welcome screen introduces users to Thriftee with its logo and slogan. The sign-up screens are designed for easy account creation and management, featuring input fields for necessary details. The home screen serves as the app's central hub, providing access to product categories, search functions, and user profiles. This mock-up emphasizes a seamless, intuitive user experience, making it easy for users to navigate and utilize the platform's features.
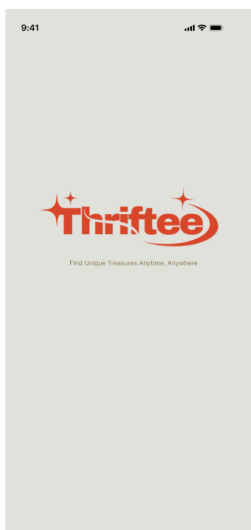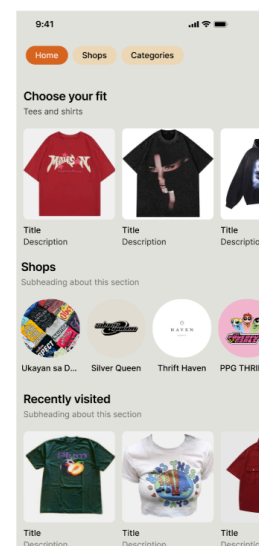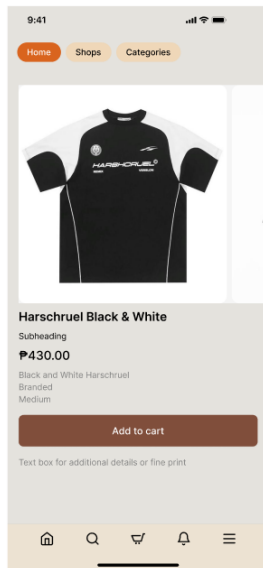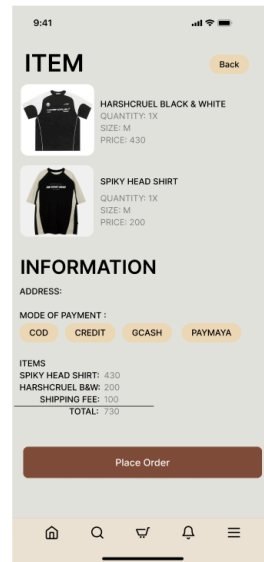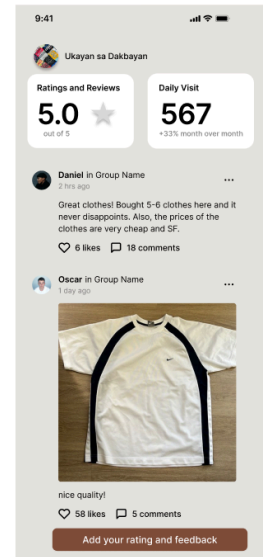
Welcome Screen	Sign-up Screen	Home Screen

Add to Cart

Order Summary Review

Customer Reviews

Prototype Flow
(PROTOTYPE PICTURES AND LABEL FIGURES)

Main Screen:
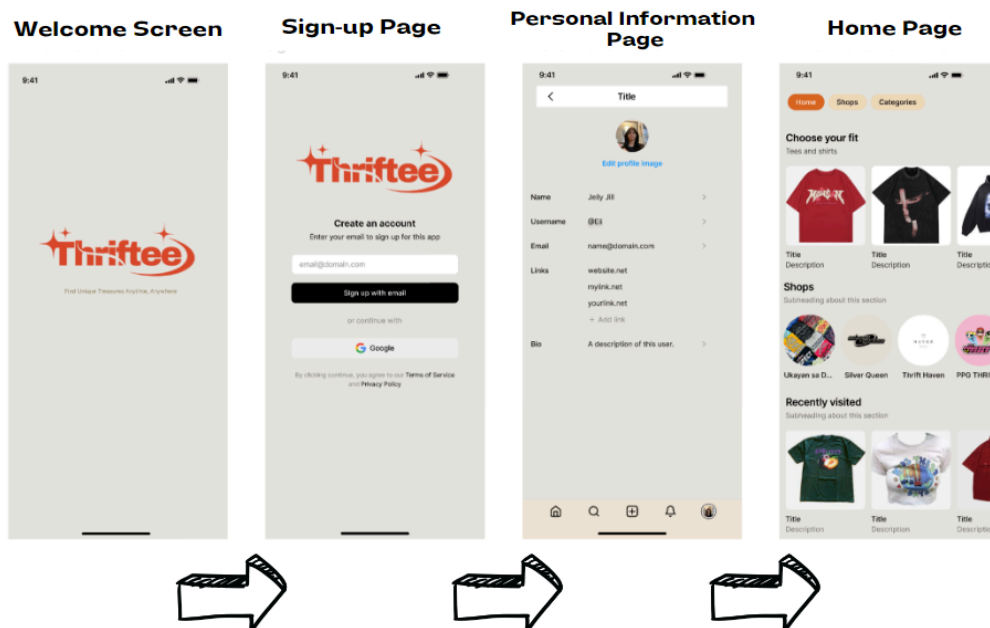
Figure 2. Welcome screen to home page

Shown in Figure 2, the application design flow starts with a welcome screen, which serves as the entry point for users. From the welcome screen, users are directed to the sign-up page. After completing the sign-up process, users are taken to the personal information input page, where they can provide additional details about themselves. Finally, users are directed to the home page, which serves as the main interface for the application.

Figure 2.1 Purchasing order

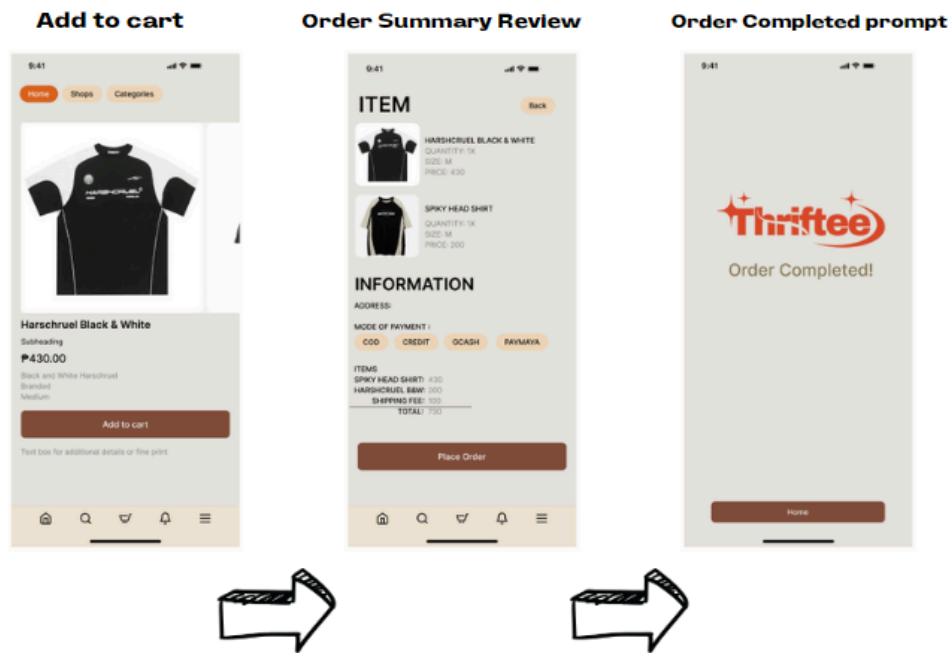Shown in Figure 2.1, after selecting items to purchase, users can add them to their cart. From the cart, users can review the order summary, which displays the items, quantities, and total cost. Once the user is satisfied with the order summary, they can proceed to complete the order, which marks the final step in the purchasing process.
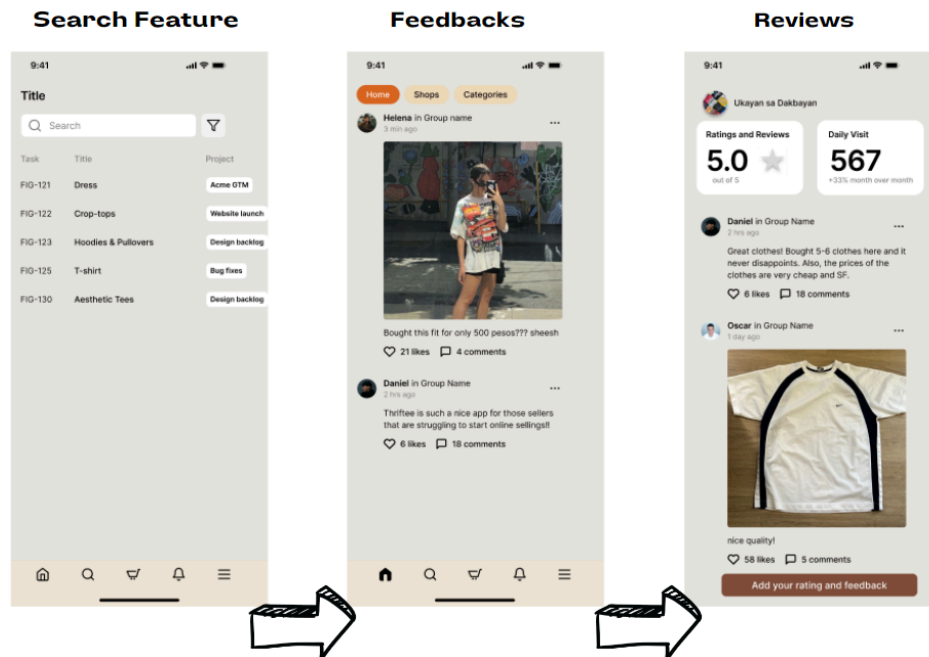

Figure 2.2 Search Feature, Feedbacks & Reviews

The application's search feature allows users to search for content and view detailed information, including user reviews and ratings. Users can provide feedback on the content they have interacted with, and this user-generated feedback is then aggregated and displayed as part of the search results.

Rationale

The rationale behind Thriftee is to address the current challenges faced by thrift store owners in reaching a broader audience and increasing sales. By providing a dedicated online platform, Thriftee offers a solution that goes beyond the limitations of social media. The app's features are designed to enhance both the buying and selling experience, ensuring ease of use, security, and engagement. This approach not only benefits thrift store owners by expanding their customer base but also offers consumers a convenient and enjoyable shopping experience.

Changes to the Requirements

Throughout the development of Thriftee, certain changes to the requirements may be necessary. These could include adding new features based on user feedback, enhancing existing functionalities for better performance, or addressing technical constraints as they arise. For example, if user feedback indicates a need for more advanced search filters or additional payment options, these requirements will be integrated into the development plan. Ensuring flexibility in requirements allows the project to adapt and improve, ultimately leading to a more robust and user-friendly application.

Initial Evaluation Plan

The initial evaluation plan for Thriftee involves conducting usability tests with a sample group of potential users, including thrift store owners and customers. This will help identify any usability issues and gather feedback on the overall user experience. Metrics such as user adoption rates, task completion times, and user satisfaction scores will be collected and analyzed. The evaluation will also include monitoring the app's performance in terms of load times and transaction processing. This comprehensive approach ensures that Thriftee meets user needs and performs efficiently before its official launch.

Usability Specifications

- **Easy Navigation:** Intuitive menu and navigation bar, clear and consistent layout, and easily accessible home, profile, and search functions.

- **Quick Load Times:** Optimized performance for fast page and feature loading with minimal delays when switching between sections.

- **Seamless Transitions:** Smooth transitions between product browsing, adding to cart, and checkout, ensuring a consistent user experience across different sections.

- **Clean and Visually Appealing Interface:** Simple and modern design with clear labels and instructions, featuring high-contrast text and buttons for readability.

- **Effective Search Filters and Categorization:** Easy-to-use search filters based on various criteria with logical and intuitive product categorization.

- **Secure and Straightforward Payment Processing:** Clear and simple checkout process, multiple secure payment options, and visible security assurances during transactions.

- **User Account Management:** Easy creation and management of user profiles with customizable account preferences and settings.

- **Responsive Design:** Compatibility with various devices ensuring a consistent user experience across different screen sizes.

- **Feedback Mechanism:** Easy access to user reviews and ratings, with the option for users to leave feedback and suggestions.

Population

The primary population for Thriftee consists of thrift store owners and customers who enjoy purchasing second hand items. This includes a diverse range of users from various age groups and backgrounds who are tech-savvy and prefer shopping online. Thrift store owners who want to expand their reach and increase sales will benefit from the platform. Additionally, environmentally conscious consumers and bargain hunters looking for unique and vintage items will find Thriftee appealing. Understanding this population helps tailor the app's features and marketing strategies to effectively meet their needs.

Prototype Tasks

Key prototype tasks for Thriftee include creating user profiles, browsing and searching for products, adding items to the cart, and completing secure transactions. Users should be able to easily navigate through product categories, use search filters to refine

results, and view detailed product descriptions and reviews. The process of adding items to the cart and proceeding to checkout should be straightforward and secure. Additionally, managing user accounts and preferences is an important task. Ensuring these tasks are intuitive and efficient is crucial for the success of the prototype.

Roles

When conducting this assessment, the team is planning to work with 5–10 participants. With this in mind, the team will divide people into groups with similar functions for the assessment.

Developer / UI Design Members	Task(s)
Forones, Marie Ivone C.	Take note of the participant / user's experience and observing how users interact with the search results, their satisfaction with the information provided, and any issues or difficulties they encounter.
Argallon, Nhowa O.	Take note of the participant / user's experience and observing how users interact with the search results, their satisfaction with the information provided, and any issues or difficulties they encounter.
Monterola, Sandara M.	Take note of the participant / user's experience and observing how users interact with the search results, their satisfaction with the information provided, and any issues or difficulties they encounter.

Table 2. Team Members Task

Welcome Screen	Within 1 minute or Below	Highly Acceptable	Successful
	Above 1 minute	Not Acceptable	Unsuccessful
Main Page	Within 5 minutes or Below	Highly Acceptable	Successful
	Above 5 minutes	Not Acceptable	Unsuccessful
Purchase Page	Within 5 minutes or Below	Highly Acceptable	Successful
	Above 5 minutes	Not Acceptable	Unsuccessful

Table 3. Time Interpretation

<center>**Heuristic Evaluation**</center>

The ThrifTee prototype will be evaluated within each type of Heuristic Evaluation

Visibility of System Status

The Thriftee prototype effectively informs users about the current state of the application. Notifications and feedback mechanisms are clearly visible, providing users with immediate updates on their actions, such as successful logins, added items to the cart, and completed purchases.

Match Between System and Real World

The Thriftee application uses simple, straightforward language that is easy for users of all ages to understand. The terminology and icons used are familiar to users who are accustomed to online shopping, ensuring an intuitive experience.

User Control and Freedom

Thriftee offers users control and freedom through features like "Cancel" and "Back" buttons, allowing them to easily correct mistakes or navigate back to previous screens. This prevents users from feeling trapped and enhances their confidence in using the app.

Consistency and Standards

The application maintains a high level of consistency across different screens. Navigation elements, buttons, and labels are placed uniformly, helping users predict where to find functions and actions.

Error Prevention

Thriftee includes several error prevention mechanisms, such as form validation to ensure all required fields are correctly filled before submission.

Recognition Rather than Recall

The prototype ensures that options and actions are visible and easily accessible, reducing the need for users to remember information. Menus, search filters, and cart details are always displayed prominently, aiding users in navigating the application without relying on memory.

Flexibility and Efficiency of Use

Thriftee caters to both novice and experienced users by providing shortcuts and streamlined processes. Features like personalized recommendations and quick-add to cart options improve efficiency for regular users, while clear instructions and intuitive design assist newcomers.

Aesthetic and Minimalist Design

The design of Thriftee is sleek and minimalist, focusing on essential elements to avoid clutter. This aesthetic not only enhances visual appeal but also ensures that users are not overwhelmed with unnecessary information, creating a smooth and enjoyable user experience.

Help Users Recognize, Diagnose, and Recover from Errors

While Thriftee indicates when users make mistakes, such as trying to add out-of-stock items to the cart, there is room for improvement in providing more detailed error messages and recovery options. Currently, generic alerts are used, and more specific guidance will be incorporated.

Help and Documentation

The application includes a help section that users can easily access for assistance. Additionally, tooltips and guided tutorials are available to help new users understand the functionality of different features, ensuring they can use the app effectively without external support.

Participant Survey and Feedback

DATA GATHERING METHOD	DESCRIPTION
Survey (Quantitative)	For the quantitative survey, the team will use a 5-point Likert scale to gather user feedback on the application's search and feedback features, allowing for a more nuanced understanding of user satisfaction and areas for improvement.
Feedback (Qualitative)	The qualitative feedback component of the survey will involve open-ended questions and prompts to gather rich, detailed, and subjective user insights about their experiences with the application's search and feedback features.

Table 2. Data Gathering

Question	Method of Answer
Section 1	
Participant Number	Short Answer
On a scale of 1 to 5 how would you rate your experience with Thriftee prototype	
On a scale of 1 to 5 how was the UI design of the prototype	
How satisfied are you with your overall experience using the search and feedback features in Thriftee?	
Section 1	**Section 2: Features of the prototype**
Search Filter	
Reviews and Feedback	
Add to Cart	
Order Information	
Payment	
Section 3: Feedback Solution	
Your Feedback	Short Answer

Table 3. Survey Questionnaire

The questions that will be included in the survey for this prototype are shown in the table above. After the test, participants will receive this survey via google forms link.

https://forms.gle/Ux5EJgycQmAoYUxQ8

Task	Time to Accomplish Tasks	Interpretation	Classification
Scale	**Range Value**	**Interpretation**	**Classification**
5	4.50-5.00	Highly Acceptable	Successful
4	3.50-4.49	Acceptable	
3	2.50-3.49	Moderately Acceptable	Neutral
2	1.50-2.49	Fairly Acceptable	Unsuccessful
1	1.00-1.49	Not Acceptable	

Table 4. 5-Point Likert Scale Interpretation

The survey questions employ a 5-point Likert scale, where 1 denotes the most negative opinion and 5 the most positive sentiment, to standardize the measurement of user replies. This scale, which indicates the degree of agreement or disagreement with the provided statements, enables a more detailed insight of user perceptions.