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. Requirements Summary

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.

Overview

Thrift store owners face challenges in reaching a wider audience and effectively marketing their products online. The reliance on platforms like Facebook Marketplace limits their visibility and growth potential. Developing a dedicated online platform like Thriftee can address these issues by providing a seamless shopping experience that includes search filters, secure payments, and personalized recommendations. This will help thrift store owners expand their customer base, build a recognizable brand, and ultimately increase their revenue.

Moreover, the evaluation plan is divided into three distinct sections: Usability Specifications, Heuristics Evaluation, and Participant Survey and Feedback. The table that follows describes each method.

Technique	Description
Usability Specifications	The usability evaluation plan for the Thriftee design application will include the usability specifications. These criteria will provide a comprehensive framework to measure the application's overall usability and identify areas for improvement.
Heuristic Evaluation	A heuristic evaluation involves usability experts evaluating a product against a set of predetermined usability guidelines, known as heuristics, to identify usability issues and provide feedback on how to improve the user experience.
Participant Survey and Feedback	During the usability testing, participants will be asked to complete a survey and provide feedback on their experience using the Thriftee design application, providing valuable insights into the usability and effectiveness of the interface and identifying areas for improvement.

Table 2. Evaluation Plan Methods

The tasks for this Prototype were split into three (3) different Sections: Welcome Screen Tasks, Main Page Tasks, and Purchase Page Tasks. The selected participants were asked to perform the following tasks for each Section to showcase the Prototype's functionality.

Method of conducting Online Tests:
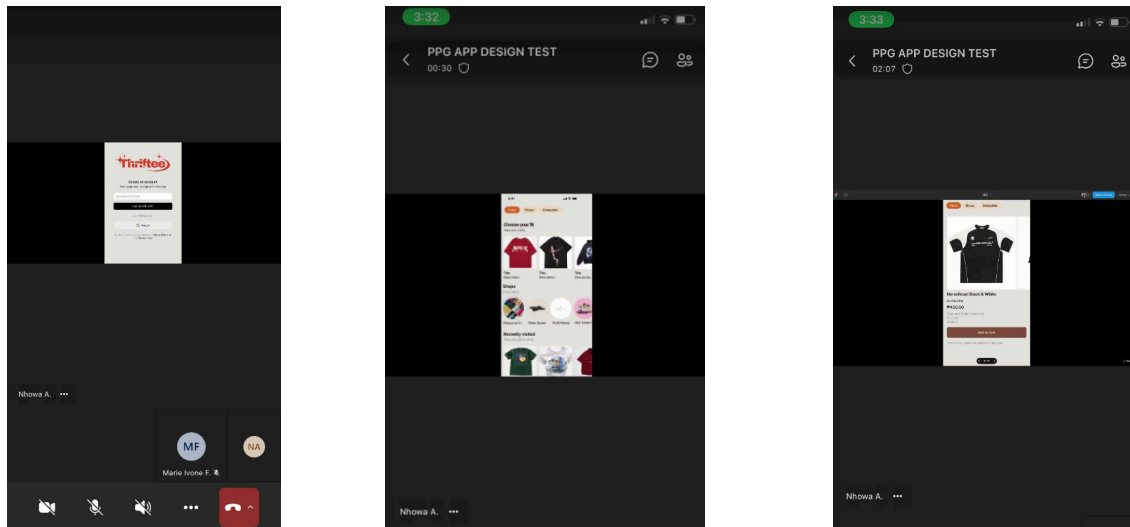
MICROSOFT TEAMS

As shown above, Microsoft Teams were used in conducting the online tests for this evaluation.

Data Presentation

Data Analysis

Usability Specifications

The Thriftee app's navigation and information structure were found to be intuitive and easy to use, with a clear and logical organization of sections. The app's performance was optimized for fast page and feature loading, with minimal delays when switching between sections. The visual design was clean and modern, featuring clear labels, instructions, and high-contrast text and buttons for optimal readability. Overall, the app's usability was deemed satisfactory, with participants able to complete all tasks with ease and minimal issues.

Task	Mean	Interpretation	Classification
Welcome Screen	0.30 minutes	Highly Acceptable	Successful
Main Page	2 minutes and 30 seconds	Highly Acceptable	Successful
Purchase Page	3 minutes and 10 seconds	Highly Acceptable	Successful

Table 3. Task Time

The results of the timed tasks during the Online Testing indicate that participants were able to complete each task section with impressive speeds. This outcome suggests that the prototype was successful in all three task sections.

Heuristic Evaluation

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.

Heuristics Conclusion Overall

Thriftee adheres to most heuristic principles effectively, providing a user-friendly and intuitive experience. While there are some areas for improvement, such as more detailed error messages and enhanced consistency, the current prototype performs well in facilitating a seamless online thrift shopping experience. These insights will guide the final adjustments before the official launch.

Participant Survey and Feedback

SECTION 1: User Experience			
Question	Mean	Interpretation	Classification
On a scale of 1 to 5 how would you rate your experience with Thriftee prototype	4.6	Highly Acceptable	Successful
On a scale of 1 to 5 how was the UI design of the prototype	4.8	Highly Acceptable	Successful
How satisfied are you with your overall experience using the search and feedback features in Thriftee?	4.6	Highly Acceptable	Successful
SECTION 2: Features of the Prototype			
Search Filter	4	Acceptable	Successful
Reviews and Feedback	4.4	Acceptable	Successful
Add to Cart	4.6	Highly Acceptable	Successful
Order Information	4.4	Acceptable	Successful
Payment	4.4	Acceptable	Successful
Average	**4.47**	**Acceptable**	**Successful**

Table 4. Survey Data Interpretation

According to the survey findings displayed in Table 4, most participants considered the prototype's features and design were excellent and highly acceptable. The majority of the participants expressed satisfaction with the prototype's functionality and ease of use, and their experience testing it was overwhelmingly positive. This result implies that the prototype's features and design were successful in satisfying the needs and expectations of the users, and that the testing process was productive.

Additionally, the feedback provided in Section 3 overwhelmingly stated that the prototype was excellent/good. However, there are some suggestions that indicate the lack of features of the design prototype. Nevertheless, the given feedback further reinforces the success of the prototype in delivering a satisfactory user experience.

Design Implications:

- **Does your prototype need to be altered in order to address the results of the analysis, or was it completely successful?**
    - The results of the analysis indicate that the Thriftee prototype was successful in addressing the limitations of thrift store operations by providing an exclusive online platform. The prototype showcased the application's main features and user flow, including a welcome screen, sign-up or log-in screen, and home screen that served as the central hub for navigation. Users could access their profile, search for products, view reviews, and add items to their cart, demonstrating a seamless transition between browsing, selecting, and purchasing products.

- **What improvements could be made to the design to address any shortcomings?**
    - To address any shortcomings, several improvements could be made to the design:
    Enhanced Search Filters: Adding more advanced search filters to help users quickly find specific products based on categories, brands, or keywords.
    Additional Payment Options: Integrating additional payment options, such as mobile payment methods or cryptocurrencies, to cater to a broader range of customers.

Technical Enhancements: Addressing technical constraints by optimizing the application's performance, improving load times, and ensuring compatibility across different devices and browsers.

- **Did you discover any major flaws that would suggest a completely different type of design?**
    - While the prototype was successful, there were no major flaws that suggested a completely different type of design. However, if significant issues were identified, alternative designs could include:

        Gamification: Adding components to a platform, like tasks or incentives, to entice users to interact with it more frequently.
        Social Sharing: Including tools for users to share their favorite products or purchases on social media sites.
        Customized Product Suggestions: Using past browsing and purchase information to provide users with customized product recommendations.
        Improved Customer service: Ensuring prompt resolution of user inquiries by offering improved customer service by phone, email, or live chat.

        These enhancements and substitute designs would contribute to the Thriftee application's improvement, guaranteeing that it stays user-friendly and efficient in augmenting the clients' buying experience.

Critique and Summary

What were the advantages and disadvantages of your evaluation?
- Several advantages were determined in the Thriftee design application's evaluation. The comprehensive usability standards offered a foundation for evaluating the overall usability of the program and pinpointing areas in need of development. Experts in usability conducted a heuristic review that made it possible to identify certain usability

problems and yielded insightful recommendations for improving the user experience. The evaluation's findings showed that users found the Thriftee app's performance, visual design, information structure, and navigation to be user-friendly, effective, and intuitive. However, the usability evaluation also had some limitations. The evaluation may have involved a relatively small number of participants, which could limit the generalizability of the findings and the ability to identify less common usability issues.

What would you have done differently knowing what you know now (both designwise and evaluation-wise)? Given more resources, what could you have done that would have produced significantly more insightful evaluation results (again, whether this is an improved prototype or a different evaluation path).

- To improve the Thriftee prototype and evaluation, several design and evaluation enhancements could have been implemented. Design-wise, the application could have incorporated advanced search filters, personalized recommendations, social integration, and expanded payment options to enhance the user experience. Evaluation-wise, a larger and more diverse participant pool, longitudinal testing, A/B testing, user journey mapping, and feedback integration could have provided more comprehensive insights and addressed long-term usability challenges. By addressing these areas, the Thriftee application could have been further refined to deliver a more user-centric and successful solution for the thrift store industry.

Summary of the Project

In conclusion, the Thriftee project aimed to modernize thrift store operations by providing an exclusive online platform. The prototype, designed using Figma, showcased the application's main features and user flow, emphasizing user-friendly design and intuitive navigation. The survey findings indicated that most participants considered the prototype's features and design to be excellent and highly acceptable, with the majority expressing satisfaction with the prototype's functionality and ease of use. The overwhelmingly positive feedback suggests that the prototype was successful in satisfying the needs and expectations of

the users, and that the testing process was productive. Overall, the Thriftee project demonstrates a transformative solution for thrift store operations, enhancing the shopping experience for customers and streamlining the sales process for store owners.