

UNITEE: A Web-based Storefront for School Uniforms and Commodities

A Capstone Project

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ABSTRACT

ACKNOWLEDGMENT

This study would not be a success without the teamwork of the team and the people that needed help on a certain problem which became our inspiration for doing this research. It is our honor that we may give thanks to the whole team.

To Mrs. Virginia Verdun for her guidance as our adviser, Mrs. Aurora Miro for the never-ending support, To Mrs. Janette Tanquis for her insights and patience in handling our inquiries, we are so thankful to you for making this project successful.

And most importantly, to God be all the glory.

DEDICATION

This study is dedicated to the individuals and organizations in hopes that this study may be of help in catering the needs of people as a whole and make use of technology as a means of making things easier and helping people get their job done as fast as possible.

The researchers also dedicate this study to their loved ones who never got tired in supporting them along with the instructors of the College of Computer Studies who have taught them their needed knowledge and skills that may successfully lead them to the goal of this study.

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CHAPTER I

INTRODUCTION

Technology is the driving force for humans to achieve their goals and have a blissful life. It has shaped the world with the help of the advancements it has made. Without technology, the world would stay as it is without progress. In today's digital era, researchers can find problems in society and provide solutions to them with the help of their field of study. Thanks to the great technological leap, we can do things much easier than before. Online shopping, food delivery, traveling anywhere with just a single click, and many more great things were made and are still being made that help us go through our lives daily. It would be great if users purchased merchandise on a single platform that fits their preferences. This study addresses the problem of users needing help deciding where and how to buy their uniforms and other school and learning materials seamlessly. With features based on basic information, such as the size and program of the users, they can select various choices and ask for assistance from customer support. This study also addresses the situation in which the user does not know when the new stocks of merchandise will be available, what tailoring shops have the best quality of service, or what merchandise is trending and wants to be notified of these details.

Rationale of The Study

Parents are either at work or are otherwise busy. Expecting them to come to the university at a specific time and day to receive the most affordable pricing or to have their children measured and then place orders for school uniforms is more of an intrusion than a convenience.

For universities with numerous facilities, as is typically the case for K–12 and College students, the uniform shop may not be "on campus," especially for parents with junior or senior high students who may have to commute to the shop's location to place an order. Older students often have more formal uniform requirements, such as coats and ties, including the necessity for sports outfits. In the end, parents might need to consult several sources to buy uniforms for their children, then go to a different source for sports uniforms and yet another source for spirit wear. The ordering process gets a failing grade.

On top of that, another prominent problem is the inconsistent garment quality and branding that negate dress code consistency. Each school has explicit, deliberate standards. Consistency in presentation is crucial to highlighting your passion for excellence and instilling pride in students, faculty, and families.

With the use of a survey, the absence of an online store for school uniforms and other merchandise at the University of Cebu Lapu-Lapu and Mandaue (UCLM) has led to significant dissatisfaction among students during purchases. The lack of timely communication about order statuses contributes to uncertainty and discomfort. Furthermore, frequent unavailability of essential items, coupled with inconsistent garment quality and branding, disrupts dress code consistency and undermines the institution's image. Uncertainty regarding restocking further compounds these challenges. The reliance on manual selling processes introduces inconveniences and inefficiencies, hindering a smooth buying experience. Overall, the lack of an online shop perpetuates these issues, causing widespread discontent among students and parents seeking reliable access to school uniforms and supplies at UCLM, a problem also experienced firsthand by researchers and students but often overlooked.

The Letran College community has expressed concerns about delays in the processing and delivery of student uniforms by Colegio's Bookstore. These delays have been attributed to factors such as a surge in pre-orders due to late announcements from educational authorities. The pandemic-induced reduction in the supplier's workforce has also affected uniform production. The supplier is working to overcome these challenges, with regular uniform deliveries prioritized based on order placement. Efforts are being made to have daily uniforms delivered by the end of February and to replenish quadri-centennial polo shirt stock by the end of January. Students have experienced extended waiting periods for pre-ordered uniforms, particularly for PE sets. The Department of Student Affairs (DSA) emphasizes adherence to the dress code, allowing temporary permits for students without uniforms to wear civilian clothing in line with guidelines. Wednesdays are designated as wash days, and the Quadri polo shirt can be worn. Those without the required attire can wear the school uniform or civilian clothes within dress code parameters. In response to delays, some students are considering external uniform sources to comply with DSA regulations while managing the delays. Letran College is actively addressing these issues to ensure a smooth educational experience for its students (Divina, 2023).

For many years, a nearby store has often provided school supplies, frequently promoting their business as the only place where parents can get the right uniform for the school of their choice. But the once-admired advantages of outfitting a student in-store have now given way to a plethora of perks when purchasing online. For parents balancing a demanding lifestyle, shopping in stores is no longer the favored alternative. Parents today are accustomed to ordering their household products from Amazon and food from their preferred supermarket online. They are accustomed to smooth internet buying processes that make purchases simple and understandable.

Online shoppers have high standards. They anticipate finding the things they're looking for quickly, having them in stock, and receiving them shortly after making their purchase. And if something is wrong with their purchase, they anticipate having no trouble returning it and receiving their money back in their accounts in a matter of days. Even those that are experimenting with online retail do not provide them with this kind of service (Linz, 2021).

Apparently, online shopping is becoming increasingly popular with consumers every year. Online shops are also up against fierce competition, and few are successful. This shows that there is still much for companies and scholars to learn about the fundamental factors that influence the success of online purchasing. This work presents an integrated, thorough nomological network based on considerable prior research on the significance of numerous online purchasing antecedents (Venkatesh, Speier-Pero, & Schuetz, 2022).

Before the introduction of e-commerce and the Internet, consumers could buy from local companies or go on a shopping trip to get clothing and other items. The options are not only many but also limitless, thanks to e-commerce. Traditional small businesses can no longer meet all of their consumers' demands. While it is vital to support local businesses, having access to hundreds of websites on the Internet is a fantastic opportunity. Because of the ease, many purchase online rather than at an actual store. You save time by not having to go to the store, try on clothes, and then return home when you purchase online (Paularo, 2023).

Adding an online-to-store channel increases the supplier's total profit if the unit logistics cost exceeds a predetermined threshold based on the relative values of the allowances given by the retailer, traffic congestion, and sustainability. Suppose the emergency purchase of logistical services is allowed. In that case, consistent pricing always increases the retailer's overall profit, regardless of whether the shop channel has devoted consumers (Niu, Mu, & Li, 2019).

When accepting new ideas, younger generations are always first, and e-commerce is no exception. According to one study, 52% of Filipino internet users are between 25 and 34. Combined with 18–24-year-olds, they account for roughly 80% of all shoppers. Because of adulthood's increasing purchase power and responsibilities, Millennials are predicted to outnumber Gen Z. Adapting your sales and marketing operations to target these age groups can dramatically increase the number of consumers your company receives (Chan, 2023).

According to (Moana, 2023), there are different causes as to why online purchasing is beneficial are because of the following: Convenient for both parents and teachers, it is always online, it has customer service, it is secured, and it is continuously improved and developed. Parents can purchase anywhere using their devices and order according to their preference. There is also

customer service if ever the customer needs assistance, as well as security that assures customers that no one can purchase products using their identity. As it is being improved and developed continuously, it can adapt and improve according to the needs of the users and customers as time passes by.

As a result of having no seamless way of purchasing school uniforms and other school merchandise, the researchers introduced an application named "University Tees (UNITEE)" for parents, students, and other users that needed a web-based storefront. The researchers made it so that the tailoring shops and the university institution could work hand in hand to provide products related to any events inside the institution.

Since most Filipinos are active in online shopping, Many Filipinos use their mobile devices to access various online platforms to purchase their necessities since it offers much more affordable options than purchasing them in physical shops. With unending development, experts have created ways to make life easier for regular people and assist people with disabilities. Online shops are game changers because they are time-saving, expanded cashless payment options, secure user data, a variety of options, and product reviews.

Objectives of the Study

This study aims to develop a web-based storefront for school uniforms and other merchandise called "UNITEE," which offers users a means to access a tool that empowers them to choose and acquire merchandise mentioned above through recommendations available at the university.

Specifically, this study seeks to address the following:

1. Determine the preferences and responses of the target-end users/respondents.
 - 1.1. Identify their basic information, program, and sizing.
2. Develop features that will aid customers in purchasing uniforms:
 - 2.1. Develop an inventory system for uniforms and other merchandise in each department.
 - 2.2. Integrate a recommender algorithm that recommends in terms of:
 - 2.2.1. Customer most selected size;
 - 2.2.2. Customer selected department;
 - 2.2.3. Top rated products by supplier;
 - 2.2.4. Most searched products;
 - 2.3. Integrate an order tracking feature for customers to be notified of their order status.
 - 2.4. Develop a verification of payments feature for admin.
 - 2.5. Develop a product and supplier rating feature for customers.
 - 2.6. Develop a feature that will generate reports for admin and suppliers.
3. Produce a web-based storefront system for school uniforms and merchandise ordering and purchasing.

Scope and Limitations of the Study

This study aims to develop a system as the solution for the challenges faced by students from the University of Cebu Lapu-Lapu and Mandaue campuses regarding the availability and inventory of school uniforms and other merchandise. The study will also develop features in notifications, intelligent systems, and sizing as it specifically focuses on the problems related to purchasing school uniforms and merchandise.

In this study, we focus on order management, order tracking notification, account management, and product management features within the system dedicated to the exclusive ordering of uniforms and other merchandise. The administrative functionalities include handling pending orders, verifying payments, approving orders, generating receipts, viewing the order list, exporting the order list, and verifying the claiming of orders. Furthermore, the user can browse and view products, add selected items to the cart, proceed to checkout, upload proof of payment, access and review their purchase history, and provide product reviews. A critical aspect of the system is the order notification feature, which allows users to stay informed about the status of their orders and access relevant details. Account management capabilities permit users to create accounts and customize their profiles.

In contrast, both users and administrators can securely log in to their respective accounts, but only users can make an account. The administrators are manually added to the database. The study also explores the generate report feature that empowers administrators to gain insights into business performance. They can access comprehensive data on total sales, the number of orders, items sold, and the current status of orders and sales. Another essential administrative function is product management, where administrators can efficiently manage the product inventory. This includes adding new products, updating existing ones, deactivating or activating items as needed, and obtaining an overview of all available products.

Significance of the Study

The study focuses on the potential benefits it offers users purchasing school uniforms and merchandise through the application "UNITEE." The following groups stand to gain from the findings and outcomes of this study:

Students. The students will benefit from this study through the development of a web-based platform, which will provide them with a convenient and comprehensive platform for purchasing school uniforms and merchandise.

Parents. The parents of students attending the University of Cebu Lapu-Lapu and Mandaue campus will benefit from this study by accessing a user-friendly online platform.

College of Computer Studies. The department will benefit from this study by offering practical applications and insights into e-commerce technologies, enhancing its curriculum and research focus.

Tailoring Shops. Tailoring shops that provide school uniforms and related services will benefit from this study through increased visibility and exposure on the online platform.

Suppliers. School uniforms and merchandise suppliers will benefit from this study by understanding student preferences and needs.

Researchers. Researchers in e-commerce, retail, and customer experience can benefit from this study by exploring the challenges students face when purchasing school uniforms and merchandise.

Future Researchers. Future researchers can build upon this study to explore the dynamics of purchasing school uniforms and merchandise in educational settings.

Flow of the Study

This diagram shows the different inputs, the processes that these inputs will undergo to produce the needed information, and the output of the study.

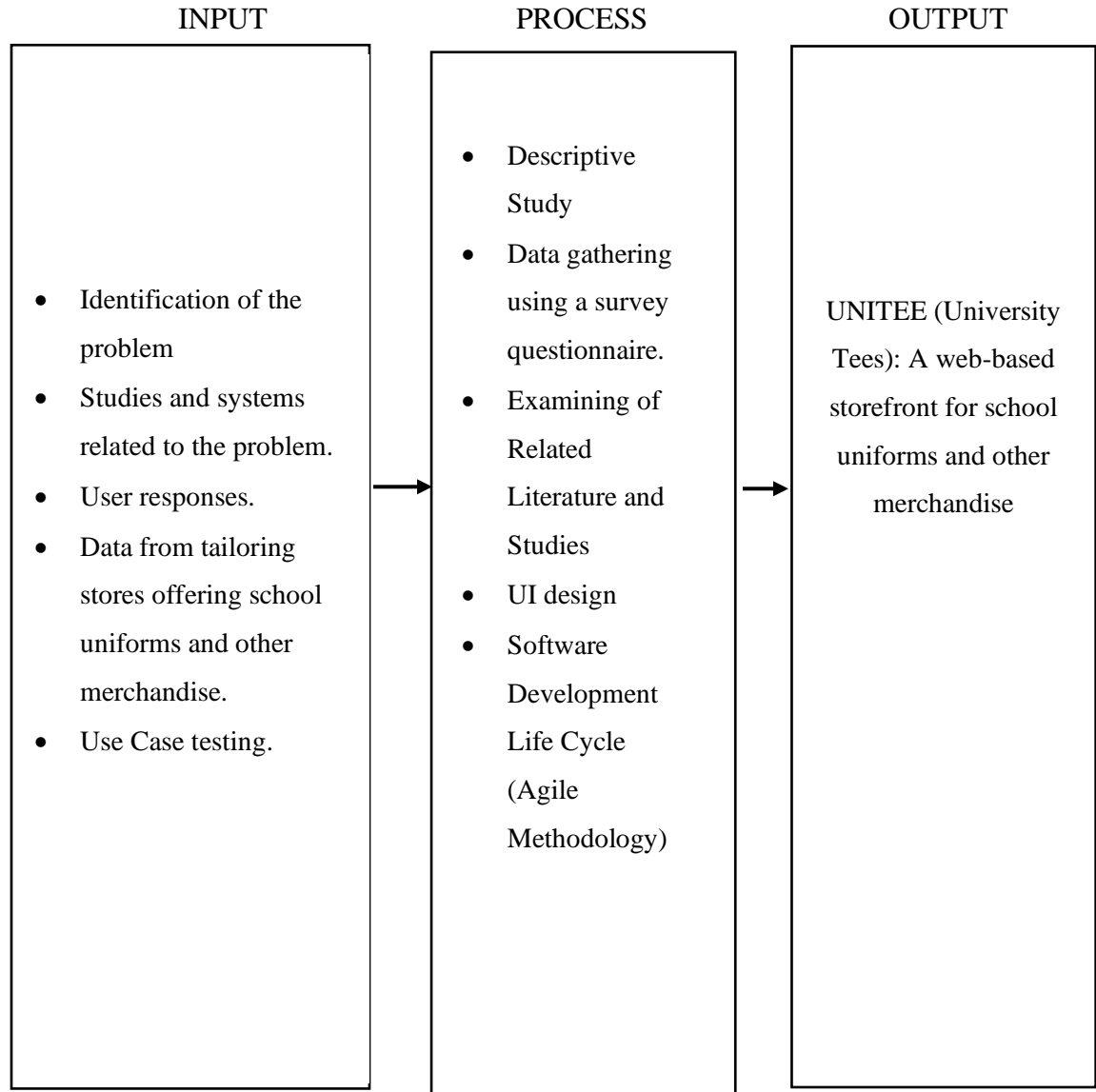


Figure 1. **Flowchart of UNITEE**

Figure 1 shows the flow of the study. The study first identifies the issue to highlight the importance of the solution this study will develop. After that, the literature is examined to provide context and a solid grounding for the concepts on which this study will be based. Finally, data collection begins, which will be accomplished through observation, interviews, and research of previously collected information. The research phase will begin if the data are sufficient and entail examining the study's needs and technicalities. If the data do not demonstrate sufficiency and

feasibility, the study returns to problem identification. After the analysis phase, the strategy formulation phase will help direct the study to achieve its goals. After that, a UI prototype is created to provide the application with a general idea of the characteristics it has to have to meet the study's goals. The documentation of different diagrams and development life cycles to follow. After the prototype is finished, the application is created using logic and procedures that lead to the study's result.

Definition of Terms

This part shows the different terms used in this study and how they are used as part of this study.

Database – refers to the records of tailoring shops and products offered using Firebase.

Features - refers to specific functionalities or capabilities of the UNITEE.

Intelligent System – refers to the recommender and notification feature of the system.

Inventory - refers to the tracking of sales and availability of stocks of merchandise.

Merchandise - refers to products available in UCLM besides school uniforms.

Preference – refers to the wants and needs of the users.

Recommendations - refers to the respondents' preference based on the departments they belong to.

Target-end users - refer to the students, parents, and administrators in UCLM that UNITEE is designed for and intended to be used.

Uniforms - are standardized clothing or attire worn by students of their respective departments in UCLM.

Web-based storefront - refers to an online platform or website where school uniforms and other merch are displayed and sold to students, parents, and administrators over the Internet.

CHAPTER II

REVIEW OF RELATED LITERATURE AND STUDIES

Introduction

This section contains discussion and knowledge on online shops, school uniforms and merchandise, and an intelligent recommender system. This section also includes the local and foreign studies related to ordering and notification systems that are needed in developing and understanding the concepts and principles of this study.

Related Literature

Online Shopping

According to (Morah, 2021), Buying and selling online has become a significant part of the daily routine for many individuals. People may purchase from the comfort of their own homes without the pressure of a salesperson. Online markets provide a new, more straightforward way to exchange nearly any item or service. Customers and companies have embraced Internet sales as a more cost-effective and easy shopping method. Still, like anything related to the Internet, purchasing online has advantages and disadvantages.

The practice of purchasing products and services through the internet is becoming increasingly popular. According to the U.S. Census Bureau, e-commerce sales will be worth \$250 billion in the first quarter of 2022. During the second quarter of 2011, sales for online retail reached a total of \$47.5 billion. The most significant advantage of internet buying is its convenience. Thanks to the digital space, people can buy everything they desire from the comfort of their own houses. Because online retailers are available 24 hours a day and accessible from any place with internet access, it is simple to fit online shopping into people's schedules no matter how hectic. They do not have to organize their purchases when a physical business is open and ready to serve them (Baluch, 2022).

According to (Piad, 2022), a survey conducted by social network company Meta and business consulting firm Bain & Co., Filipino customers have increased the number of digital platforms they use for online shopping—and they are willing to switch applications if other merchants can deliver their items more promptly. Based on a June 2022 poll, each user in the nation utilized roughly 16 applications, 108 percent more than the amount recorded in the same month the previous year, according to recent joint research by Meta and Bain & Co.

This was the most rapid expansion seen in Southeast Asia. Vietnam came in second with 96 percent, followed by Indonesia and Thailand with 90 percent apiece. Respondents use online platforms such as e-commerce marketplaces, meal delivery, big store websites, small online shops, and consumer product categories. "Consumers in Southeast Asia are shopping on more online platforms than ever." This increase "confirms our findings that more consumers in the region are experimenting with new or different shopping experiences," according to the report. Meanwhile, shoppers in the Philippines, Malaysia, Singapore, and Thailand mentioned speedier delivery times as a motivation for switching platforms. This emphasizes the importance of the client experience in online purchases (Piad, 2022).

Inventory System

According to (Jenkins, 2020), Inventory management is a useful tool for businesses to determine the types and quantities of products they should order, as well as when to do so. By monitoring the entire process from purchase to sale, it helps ensure optimal stock levels and efficient operations. The technique detects and responds to trends to guarantee that there is always adequate stock to fulfill client requests and that a shortfall is announced correctly. Inventory becomes income if it is sold. Inventory (although being represented as an asset on the balance sheet) locks up cash before it is sold. As a result, having less stock costs money and lowers cash flow.

In another article by Hayes, Inventory can be considered a liability (but not in the accounting sense). A vast inventory is vulnerable to spoilage, theft, damage, or changes in demand. It's important to ensure that the inventory is covered by insurance, and if it's not sold within a reasonable timeframe, it could result in a loss or potentially be disposed of. Inventory management is critical for organizations of all sizes for these reasons. Knowing when to resupply inventory, how much to buy or manufacture, how much to pay, when to sell, and at what price may all become complicated considerations (Hayes, 2023).

According to Vinculum, Inventory management software in the e-commerce business model is critical in increasing market sales and value over time. It aids in the examination of the list of products before submitting purchase orders. To continue with the services, the relationship with the clients must be brave and have strong links to handle the task in real time. Inventory management functions fully to keep track of the valuable customer and their purchases in order to complete the task swiftly. Any inconsistency in the delivery of the items will be presented by tracking the property and resolving it as soon as feasible. Customers may also reorder the capability to receive its advantages in real-time (Vinculum, 2022).

Notification

According to Calderon, how people shop online is changing, with e-commerce becoming more of an omnichannel experience and less linear. This means that customers are no longer moving smoothly from one stage to another or within a single channel like a website or app. Retailers can use push notifications to improve e-commerce conversions and sales, even after a customer has left their website or app. Push notifications are like email recommendations, but they have an advantage because they are shorter and more easily digestible, and they can pop up on a customer's phone while doing something else. By using user behavior data to personalize push notifications, retailers can connect with customers and present them with items they will love more quickly, leading to more sales. Here are some of the best ways an e-commerce retailer can use push notifications (Calderon, 2023).

Wohllebe and his team state that mobile apps rely on push notifications to engage with their users and provide promotional content. However, the frequency of these notifications can negatively impact user behavior, leading to uninstallations and decreased direct open rates. To better understand this effect, a study was conducted on 17,500 retail app users, testing five notification frequencies over seven weeks. The results emphasized the importance of relevant and personalized content for users while cautioning against a high volume of non-personalized push notifications (Wohllebe, 2021).

According to Lavska, web push notifications have a lower engagement rate in e-commerce and retail compared to other industries, but they still prove to be effective conversion optimization tools. Only 10% of consumers allow online stores to send clickable messages to their browsers, while the utility and finance industry has a higher subscription rate. It is essential to know which e-commerce niches have higher success rates with push notifications, the typical content of these messages, and how to create engaging alerts (Lavska, 2019).

Recommender System

According to Rocca, in a broad sense, recommender systems are algorithms that recommend relevant objects to consumers (items might be movies to watch, material to read, products to buy, or anything else, depending on the industry). Collaborative approaches for recommender systems are ways that provide new recommendations exclusively based on prior interactions recorded between users and products. The so-called "user-item interactions matrix" stores these interactions (Rocca, 2019).

In another study by (Požar, 2021), a consumer behavior analysis system has several benefits, such as greater customer comprehension leading to higher satisfaction and targeted marketing campaigns, increased sales through recommendation-driven purchases, and optimal methods for specialty "long tail" goods. Notably, the COVID-19 pandemic's spike in e-commerce produced a lot of priceless online data that could be used, and Amazon and Netflix have seen tremendous sales increases thanks in large part to their recommendation algorithms. Customer profiling provides deeper insights into behavior, allowing for more specialized strategies that reward companies with more customer loyalty. In addition, the system's capability to identify unique goods helps both customers and suppliers, who may take advantage of underserved market niches and perhaps boost revenue.

According to Paschos, recommender systems may dramatically increase a user's chance of purchasing the things recommended to them, as well as their loyalty and general happiness. They lower the transaction costs associated with locating and selecting products in an online buying environment. Furthermore, because they decrease the expenses and uncertainties involved with the procurement of unknown items, recommendation systems enhance the decision-making process and quality. Recommender systems, essential in cross-marketing, may significantly increase a company's income. They enable businesses to guarantee that customers are continually introduced to new items that may be of interest to them. The ideal circumstance is when their current customer needs to be made aware of a product or service that might enhance their customer experience. From this vantage point, clients are inclined to return to the supplier and promote it to others (Paschos, 2023).

Sales Analytics

According to Shrestha, with the closure of brick-and-mortar stores during the pandemic, more and more people have turned to using their mobile devices for shopping, making it a popular alternative. Even though many markets have reopened, consumers still prefer mobile shopping. Studies show that 68% of consumers in the United States now shop on mobile devices more frequently than they did two years ago. The growth in e-commerce app usage is due to technological advancements such as digital payments and logistics and the availability of different shopping options. Adjust's Mobile App Trends 2022 report indicates a year-over-year increase in e-commerce app installations and sessions. This article examines the global trends in e-commerce app usage over the past two years, providing insights into year-over-year performance and assisting app marketers in preparing for the upcoming shopping season (Shrestha, 2022).

Desiderio states that the Philippines is expected to experience continued growth in e-commerce sales, reaching P969 billion (\$19.0 billion) by 2026. This growth is driven by increasing consumer preference for online shopping and the country's high Internet and smartphone penetration. The outbreak of COVID-19 has expedited the transition from in-person to virtual shopping experiences. The government's efforts to promote e-commerce adoption among small and medium enterprises have further fueled this growth. A survey conducted by GlobalData revealed that nearly 90 percent of Filipino consumers had shopped online in the past six months, with card payments being the most preferred payment option, followed by alternative payment tools like GCash, PayPal, and PayMaya. The growth of alternative payment methods has been furthered by the introduction of buy now pay later (BNPL) services. However, cash payments still account for over 15 percent of e-commerce transactions due to the highly unbanked population and limited financial awareness, particularly in rural areas (Desiderio, 2023).

According to (Department, 2023), the e-commerce market has experienced a surge in popularity due to the increased preference for online shopping and widespread smartphone usage. A study in the Philippines found that consumers prefer Lazada, Shopee, and Zalora as their online shopping channels. These marketplaces offer a variety of products from their fulfillment centers and third-party sellers, as well as attractive deals like free shipping and cash-on-delivery options. Social commerce is also rising among social media-savvy Filipinos, with Facebook being the most popular platform. Brands and retailers can easily promote their products on Facebook by creating a business page or online store. In contrast, smaller businesses and individual sellers can showcase their products in the built-in marketplace. Shopping has become an integral part of social media, with platforms like Instagram and TikTok incorporating features for live streaming and purchasing, leading to the emergence of a new trend known as "shoppertainment."

Conceptual Framework

The conceptual framework comprises the different variables and critical concepts in the related literature. It shows the relationship between the ideas and concepts formed by the researchers.

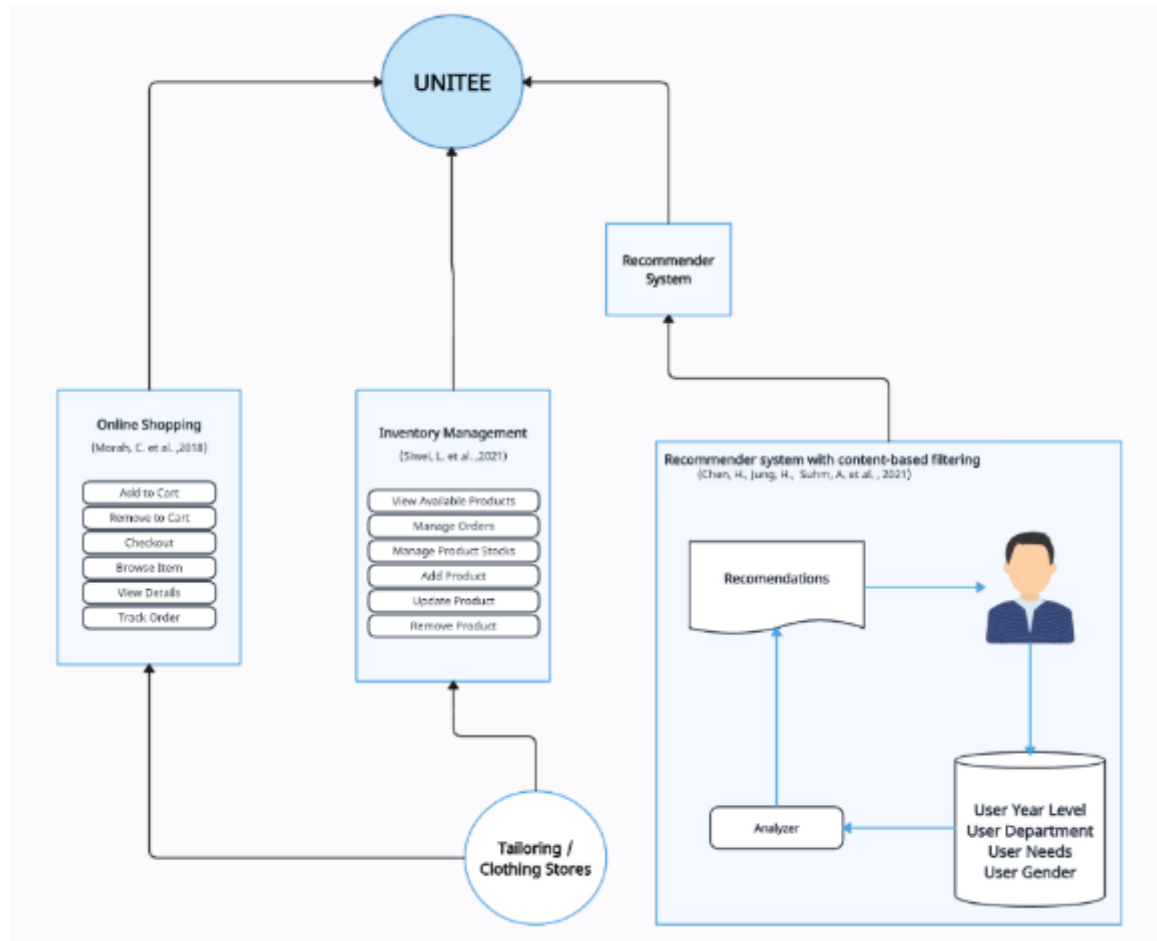


Figure 2. **UNITEE's Conceptual Framework**

Figure 2 shows the relationship between each key concept in the related literature and the researchers' goals. With this, the researchers should be able to form the needed connections to develop the system and address what issues may follow in developing the system.

UNITEE's Conceptual Framework consists of online shopping, inventory management, and a recommender system. According to (Morah, 2021), Online shopping, commonly called e-commerce, is carrying out financial transactions electronically. A product search, either on particular online shops or through search engines, begins the process. Retail websites give information about the products, including pricing and photos, while online markets like Amazon

and eBay have a large selection of products offered by sellers. The buyer enters the checkout procedure after discovering the item they want, where shipping and payment choices are provided. Credit card payments, electronic checks, and payment processors like PayPal are all acceptable forms of payment. The purchaser receives an order confirmation with purchase information upon successful payment. The product is then ready for delivery, and the buyer may follow its development. Returns and customer support services are offered in case of any problems. One of the benefits of online shopping is the convenience it offers. Customers can easily shop for items from anywhere with an internet connection, compare prices, and choose from a vast selection of products without leaving their homes.

As for inventory management, it is stated by Siwei that inventory management has steadily evolved from a conventional model to an emerging model under the impact of big data technology, artificial intelligence, the Internet of Things, and other information technologies, particularly in the e-commerce sector. This time, analyze inventory management techniques, research inventory management techniques in the e-commerce information environment, the development status of e-commerce enterprise inventory management, and examine current issues and solutions. In order to assist businesses identify an appropriate inventory management model, adapting to the e-commerce growth trend, and serving the needs of the global market economy, the aim is to analyze the influence of e-commerce on inventory management as well as future development directions and trends (Sewei, 2020).

Moreover, lastly for the recommender system, (Chen, Jung, & Suhm, 2021) stated that recommender systems are often split into the following categories: content-based, collaborative, and hybrid filtering systems depending on the data filtering and rating estimation methodologies. The content of objects and user profiles are matched in the content-based filtering approach to provide recommendations. Items' contents are shown as a collection of descriptions taken from their characteristics. The user profile is created by examining the features of goods that the user has previously bought or seen, and it contains details about the user's interests, preferences, and requirements.

These three concepts made it possible for UNITEE to be implemented as a solution for the existing problem involving the manual ordering and purchasing of school uniforms and merchandise.

Related Studies

This section contains five existing systems that are similar to UNITEE.

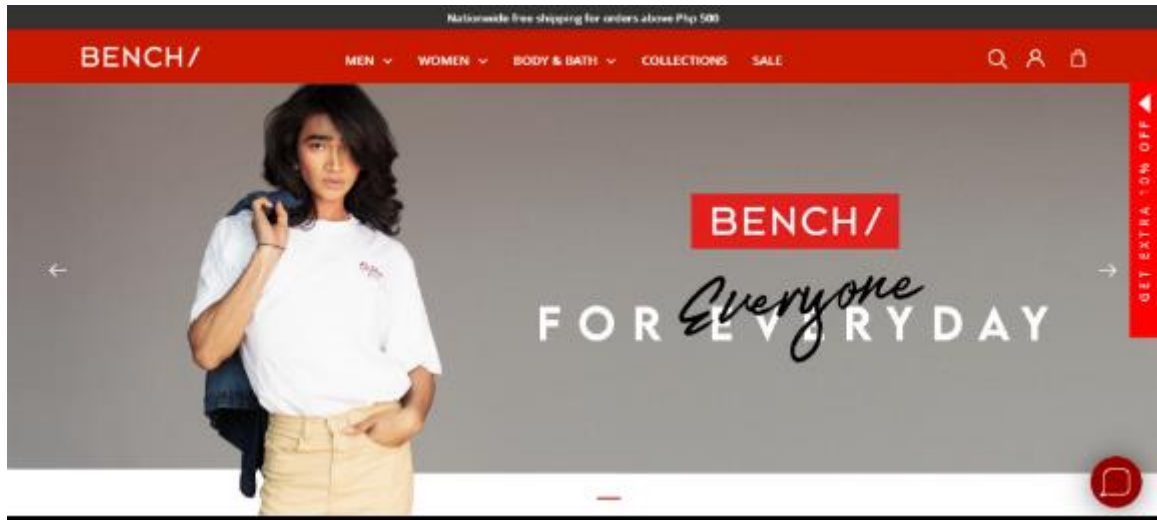


Figure 3. Bench

"BENCH/ is a lifestyle and fashion apparel company that originates from the Philippines and provides top-notch products at reasonable prices to cater to everyone's needs on a daily basis" (Bench, 2023). It has features with the same functionalities as ours, and there are specific features that this does not have, such as product recommendations, customer service, firebase technology, and products our users need.

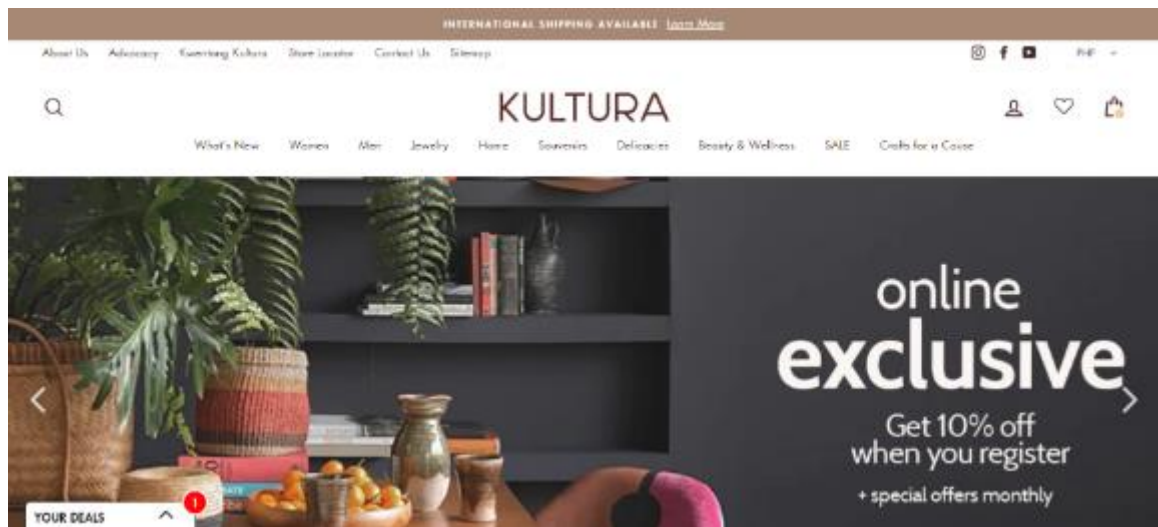


Figure 4. Kultura

"Behind every product is a community, support, identity, and sustainability story. Explore and revel in the exquisite artistry and craftsmanship of various regions in the Philippines. Kultura offers a wide range of locally-made products from sustainable Barongs, stylish Filipiniana, handcrafted souvenirs, to delectable artisanal chocolates. With its unwavering commitment to preserving our cultural heritage and supporting small businesses, Kultura also promotes environmental conservation and fosters a sense of national pride" (Kultura, 2023). Kultura is a local system that boasts its proud Filipino products. However, its products are different from what our users need. It also does not have customer service and recommendations of products, nor Firebase technology.

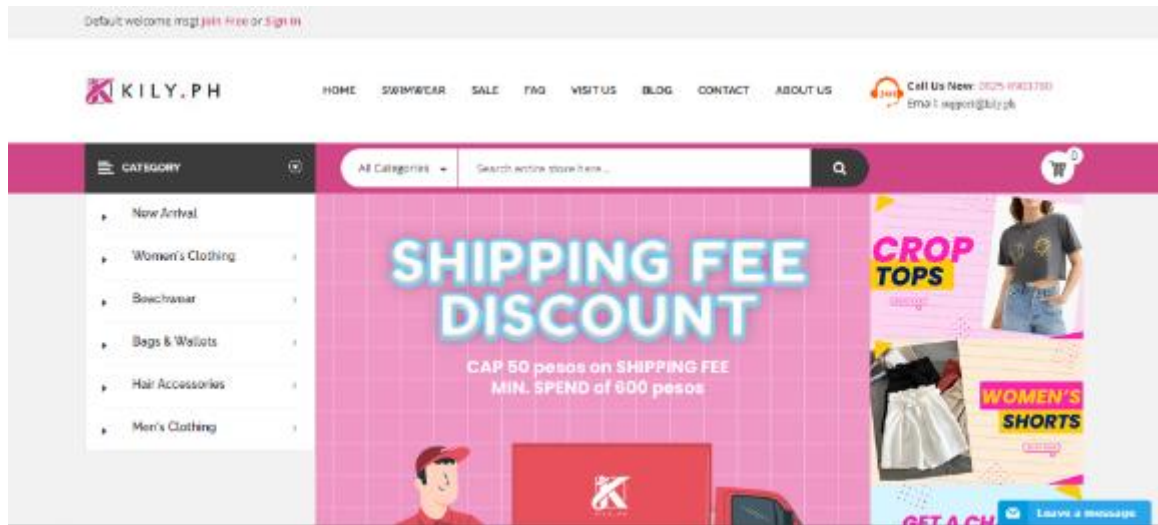


Figure 5. Kily.ph

" Kily.ph is one of the Philippines' leading online shops and one-stop online fashion shop offering the latest and trending Women's Clothing/Apparel (Blouse/Tops, Buttons-down, Dresses, Jumpsuits, Bottoms, Blazers, Jackets, Undergarments, Sleepwear, Lingerie's and Swimsuits), Men's Clothing/Apparel (Polo, Jackets, T-shirts, Long-Sleeves, Shorts and Underwear, Children's Apparel (Boys' and Girls' Wear), Jewelries (Earrings, Necklace, Bracelets and Bangles, Rings and Korean Jewelries), Bags and Wallets, Gadget Accessories (Cases, Chargers and Other Accessories), Lingerie's" (Kily.ph, 2023). Kily is a system offering fashion trends to users of all ages. Their system may look similar to ours, but their payment option is minimal, and their products do not involve any of the products our users might need.

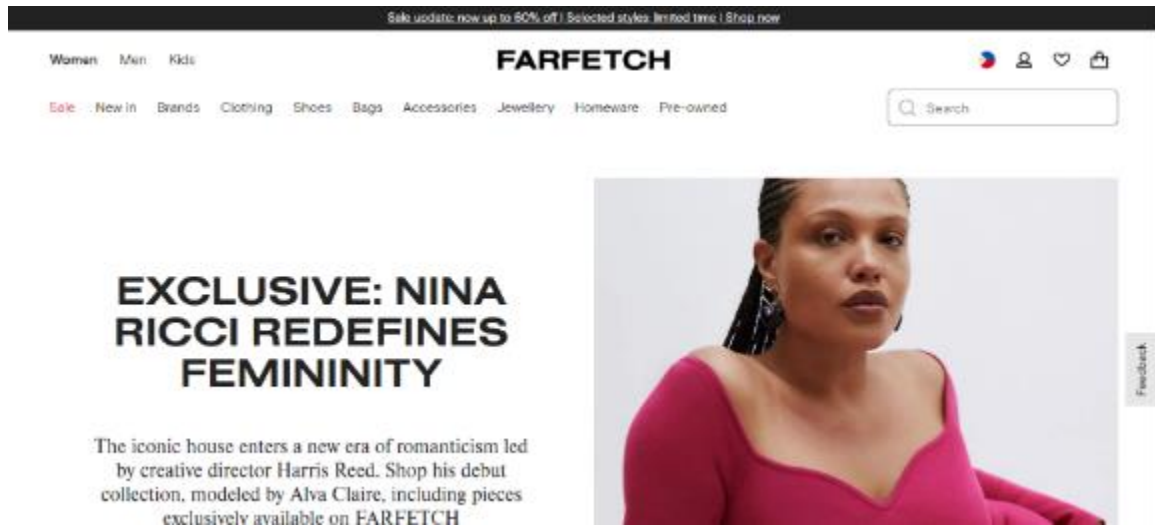


Figure 6. Farfetch

"At FARFETCH, fashion is our passion. We strongly believe in promoting individuality and providing a platform for luxury fashion lovers to connect. Our ultimate mission is to become the go-to global destination for all things fashion, bringing together designers, tastemakers, and fashion enthusiasts." (Farfetch, 2023). Just like Kily.ph, Farfetch is a system for fashion. The difference is that it connects curators and consumers in a luxury kind of relationship. It is not the relationship our users need as Farfetch does not have customer service, and the range of products differs from what the user needs.



Figure 7. Rustan's

"Rustan's stands out as the top choice for high-end shopping in the Philippines, boasting an unmatched selection of top-notch brands and premium products. Founded in 1952 in the elegant living room of husband-and-wife Bienvenido Tantoco Sr. and Gliceria Rustia-Tantoco in San Marcelino, Rustan's was among the earliest to introduce renowned international brands to discerning Filipino shoppers and visitors" (Rustan's, 2023). Rustan is a local system having a range of prestigious products. One of the things their luxurious retail destinations do not have is a sizing guide which is a great help for the users. In connection with that, their products are so prestigious that they do not meet the needs of our users.

Comparative Matrix

The comparative matrix shows the systems and applications similar to the proposed system. It shows the similarities and differences of each system.

Table 1
COMPARATIVE MATRIX

Features	United	Kultura	Farfetch	Kily	Rustan	Bench
Product Recommender	✓	✗	✓	✓	✗	✗
Product Search	✓	✓	✓	✓	✓	✓
Notification	✓	✓	✗	✗	✓	✓
Cart	✓	✓	✓	✓	✓	✓
Order Tracking	✓	✓	✓	✓	✓	✓
Product Rating	✓	✓	✓	✓	✓	✓
Supplier Rating	✓	✗	✗	✗	✗	✗
Purchase History	✓	✓	✓	✓	✓	✓

Table 1 shows the different systems in tabular form with the features to thoroughly compare them and show that they relate to our study. Compared to all these studies, our application's main advantage is that we offer services that are not only focused on purchasing and ordering merchandise but also have integrated an intelligent system that enables users to broaden their choice of products. As our products are mainly composed of school uniforms and merchandise, sizing guides and customer service are available for users.

CHAPTER III

RESEARCH METHODOLOGY

This section outlines the steps used in establishing the suggested system and includes charts and diagrams to help clarify the procedures and aid in understanding the suggested system. It also includes the software engineering process employed and designs for the user interface and database to provide a broader picture of the proposed system and its functionality.

Research Environment

This study will be conducted at the University of Cebu - Lapu Lapu and Mandaue, situated at A.C Cortes Ave., Looc, Mandaue City, Cebu, Philippines. Its student population for the Academic Year 2022-2023 was 10,303 and the sample we will use for this study is 371. Having that population makes it difficult for manual/traditional ordering and purchasing of school uniforms. The researchers envision a system to solve this issue at hand as it still stands to be one of the significant problems in UCLM.

Software Engineering Methodology

Agile Development Technology is the researchers' chosen Software Development Life Cycle (SDLC) for the study. The following phases of the selected model are based on the activities that the researchers will do to develop the proposed system.

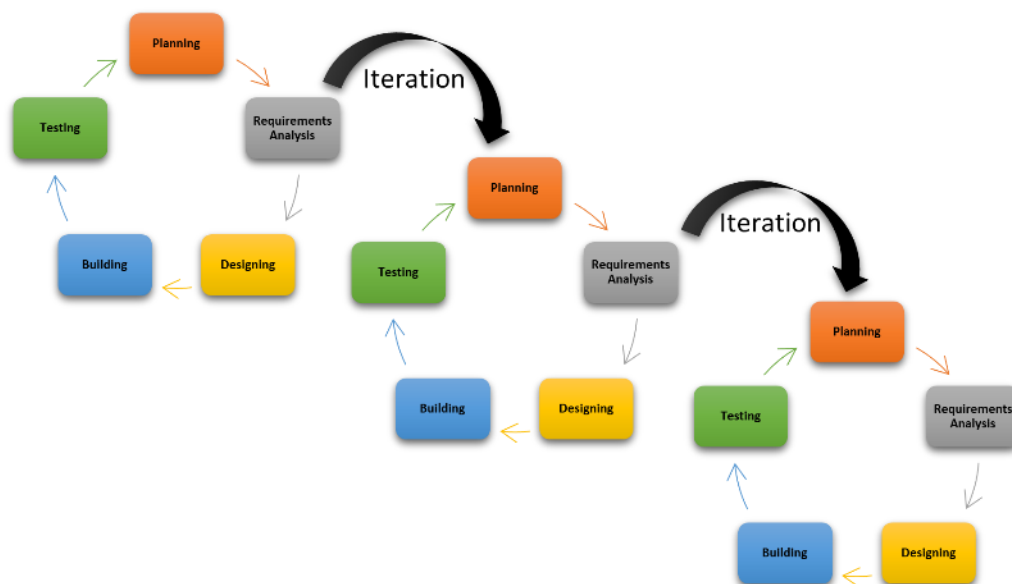


Figure 8. Agile Methodology

Figure 8 shows the many stages of Agile Methodology Technology. Depending on the project's required iteration, this methodology's five phases are repeated throughout project development. Every iteration, typically referred to as a sprint, lasts about 2-3 weeks. A functioning piece of software may be created fast using this paradigm, and any necessary additions can be handled as part of the sprint's backlog in the subsequent iteration. Additionally, because Agile Methodology was designed to be adaptable to change, particularly in the realm of technology, where user patterns change pretty fast, any changes in plans and needs may be accommodated through its utilization.

The researchers used this methodology in order to ease the time constraints. This is the best approach to accomplish it. They wanted a rapid, basic functional system to supply a working program consistently. The flexibility the Agile technique offers for modification was another factor in the researchers' decision to utilize this technique. This process enables them to make the adjustments they feel are essential whenever they need to.

Planning/Conception-Initiation Phase

The planning/conception-initiation phase is the project life cycle's first and most crucial phase. It involves initiating the project and establishing its goals, objectives, scope, timetable, and overall structure. The Business Model Canvas, Program Workflow, Gantt Chart, and Functional Decomposition Diagram are used in this phase.

Business Model Canvas

Researchers may quickly and systematically comprehend a business model using the Business Model Canvas. Using the Business Model Canvas, researchers can describe the project's value, the market, the methods for achieving the project, and how the project will function in the market. The value of the initiative will also be brought to the attention of the researchers.

Table 2

BUSINESS MODEL CANVAS OF UNITEE

Key Partners	Key Activities	Value Propositions	Customer Relationship	Customer Segments
-Uniform Suppliers/ Manufacturers -Payment Gateway Providers -Universities	-Supplier Management -Order Processing -Catalog Management -Web Application & Development	- For the students that need a web-based storefront where they can purchase the uniforms and merchandise of the university. UNITEE is a website that provides online storefront service to students that need the service.	-Customer Support -User-friendly systems -Profiling system	- University Students -Faculty -Staffs
	Key Resources -Online Catalog -Technology Infrastructure -Supplier Relationships -Payment Gateway Integration		Channels -Website	

Cost Structures -Miscellaneous Fees -Human Resources -Software development & Infrastructure -Supplier Fees	Revenue Streams -Commissions -Transaction Fees -Service Fees
---	--

Table 2 shows the commercial advantages and business model of the system. It displays the characteristics that make the application marketable, the essential tasks and collaborators needed to complete the project, the budget, the sources of income, and the target market or client groups. An overview of the app's market potential is provided in this table.

Program Workflow

The workflow of the program will be used to identify the system's flow for each of the concerned users, and this diagram will be used as a reference for creating UI diagrams.

Validation Board (Stages 1 and 2)

The Validation Board is a tool that may be utilized to validate, pivot, and monitor those pivots of assumptions. It may specify the customer, issue, and solution hypotheses, as well as the underlying assumptions associated with these elements, with the aid of the Validation Board.

Table 3

VALIDATION BOARD (STAGE 1 – PROBLEM VALIDATION) OF UNITEE

Experiment	1	2	3	4	5
Customer	Students	Parents			
Problem	Students need help ordering uniforms due to their numbers and manual	Parents are the ones giving money to their children as they buy their			

	ordering of uniforms.	school uniform.			
Solution	A web-based storefront system provides a platform where students can order and purchase the uniforms and merchandise they need in the university online and seamlessly.				
Riskiest Assumption	Implementing an online store inside a university is difficult because some tailoring shops already exist.				
Success Criteria	7/10				
Results & Discussions	8/10 agrees that ordering				

	and purchasing uniforms is difficult as the academic year starts.				
Learnings	Students must wait a long time to be catered and for the store to restock.				

Table 3 shows the issue that the research's target market faces. Additionally, it demonstrates the researchers' suggested resolution to the issue through the suggested project. The validation board also includes evidence from several interviews and surveys demonstrating that the target market of the system's proponents is willing to utilize the system, as well as information from the researchers regarding the problems their target market is trying to solve for themselves.

Table 4**VALIDATION BOARD (STAGE 2 – PRODUCT VALIDATION) OF UNITEE**

Experiment	1	2	3	4	5
Customer	Students	Parents	Suppliers		
Problem	Students have difficulty ordering uniforms due to the manual ordering and lack of notifications if the ordered uniform is available.				
Solution	A web-based storefront system provides a platform in which students can order uniforms and notification functions to alert them if the ordered uniform is available.				

Riskiest Assumption	We are adapting more solutions to the problem encountered.				
Success Criteria	10/10				
Results & Discussions	10/10 agrees that the lack of notifications is a hassle.				
Learnings					

Table 4 shows the issue that the target market of the researcher's study faces concerning the product. Additionally, it demonstrates the researchers' suggested resolution to the issue through the suggested project.

Gantt Chart/PERT Chart

A project schedule is often visually represented through the use of a Gantt chart. The graph displays the commencement and completion dates of various aspects of the project, including resources, planning, and interdependencies.

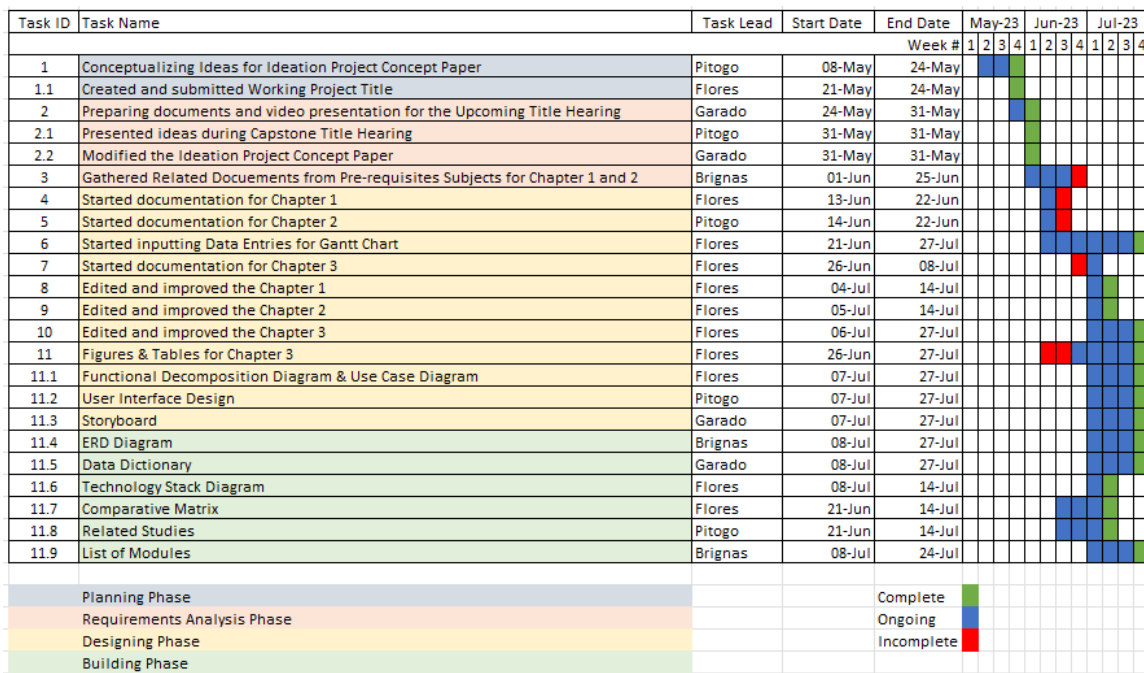


Figure 9. **Gantt Chart of UNITEE**

Figure 9 shows the projected schedule of activities for the proposed project. Through the Gantt chart, the team will be guided in assessing how long a project should take, determining the resources needed, and planning the order in which the tasks are completed. It is also helpful in managing the dependencies between tasks, making the researchers aware of the milestones to be achieved and when they should be accomplished.

Functional Decomposition Diagram

The functional decomposition diagram shows the top-down view of the system's processes. It demonstrates the system's general functioning and features, divided into more fundamental actions and procedures and the relationships between them.

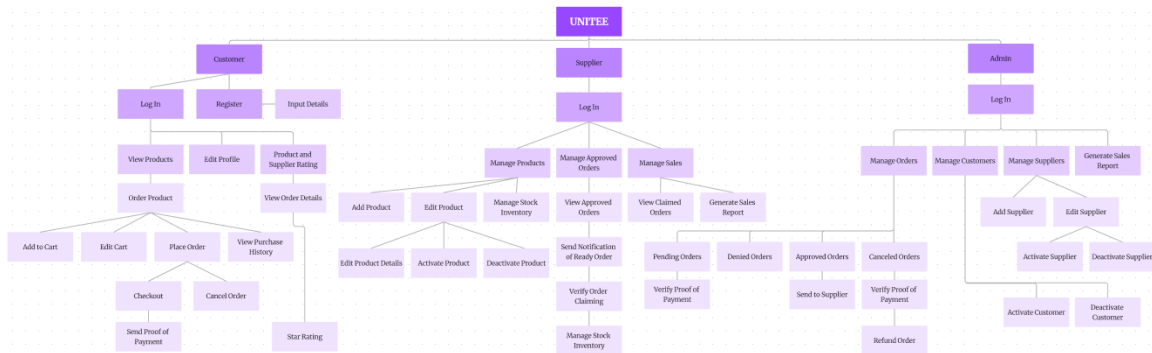


Figure 10. **Functional Decomposition Diagram of UNITEE**

Figure 10 shows the functional breakdown of UNITEE's processes, which divides it for the customer, supplier, and admin to log in and use according to their roles, respectively.

Analysis-Design Phase

One of the most critical stages in the system's development, this phase comprises a visual representation of the complete system using user interface diagrams. To ensure that the system satisfies the needs of each end user, the interaction of end users is examined in this phase. In this stage, the database design will also be developed, examining the relationships between the data in the database and the user interface diagrams.

Use Case Diagram

A use case diagram is a straightforward illustration of how different types of users interact with the system. It demonstrates the connections between the various use cases and the users and how they relate to one another.

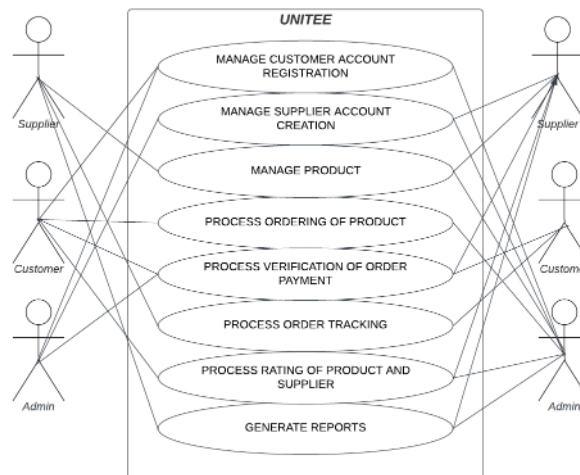


Figure 11. **Business Use Case Diagram of UNITEE**

Figure 11 shows the different users in the system and the main functionalities of the system. The customer registers itself, and the admin registers the suppliers which require their information. The users can then log in to their respective accounts. Customers can purchase a product and provide payment evidence to the administrator for validation, who will then update the customer regarding their order's progress. The admin will then approve the order for the supplier to manage the product, and after the product has been managed, the supplier notifies the customer to claim their finished order. The supplier can generate their sales report while the admin can view it.

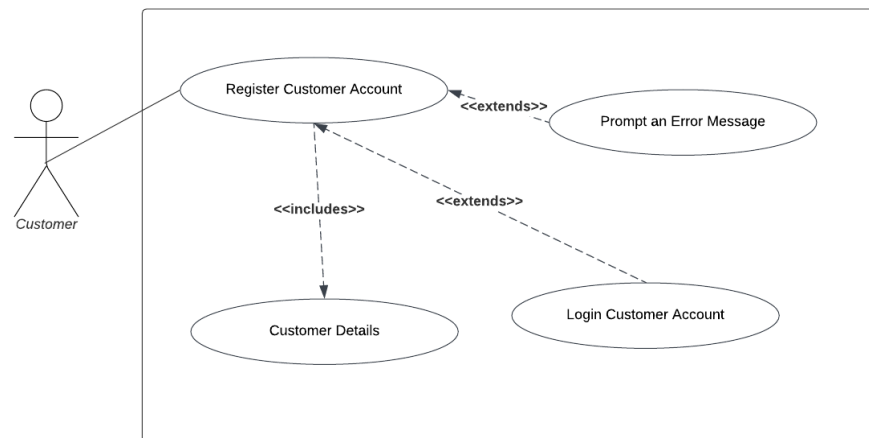


Figure 12. **Manage Customer Account Registration Use Case**

Name : Customer Account Registration
Purpose : To allow Customer to create their account
Triggering : Customer
Benefiting : Admin
Pre-Condition : Input account information
Post-Condition : Customer Account has been created.
Steps :

CUSTOMER	SYSTEM
1. Input ID Number 2. Input the first name 3. Input last name 4. Choose a department 5. Pick gender 6. Input email 7. Input phone number 8. Input password 9. Input confirm password 10. Upload a picture 11. Click the register button	12. Validate input 12.1. If not valid, an error message will prompt. 12.2. If valid, save it to the database.

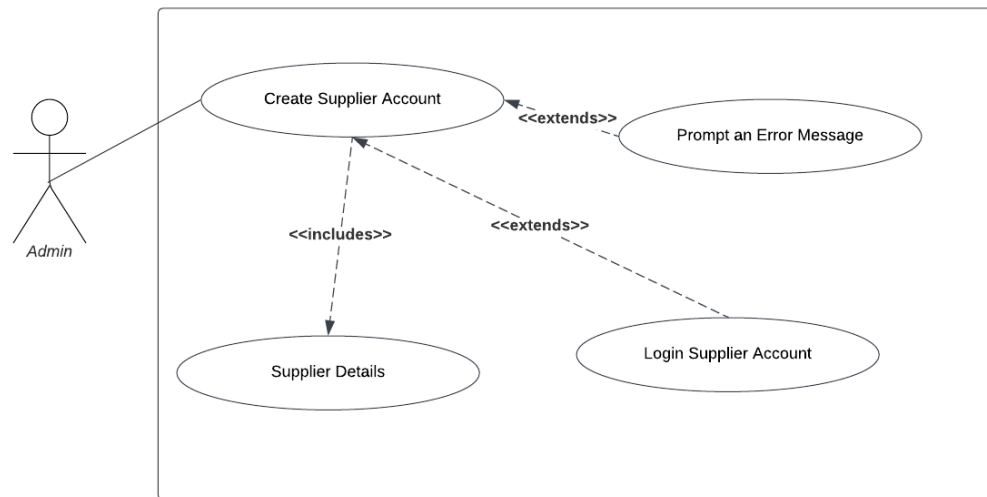


Figure 13. **Manage Supplier Account Creation Use Case**

Name : Supplier Account Creation

Purpose : To allow suppliers to have an account

Triggering : Admin

Benefiting : Supplier

Pre-Condition : Input Account Information

Post-Condition : Supplier Account has been created

Steps :

ADMIN	SYSTEM
1. Input ID Number 2. Input the first name 3. Input last name 4. Input shop name 5. Input phone number 6. Input email 7. Input password 8. Input confirmed password 9. Upload a picture 10. Click add button	11. Validate input 11.1. If not valid, an error message will prompt. 11.2. If valid, save it to the database.

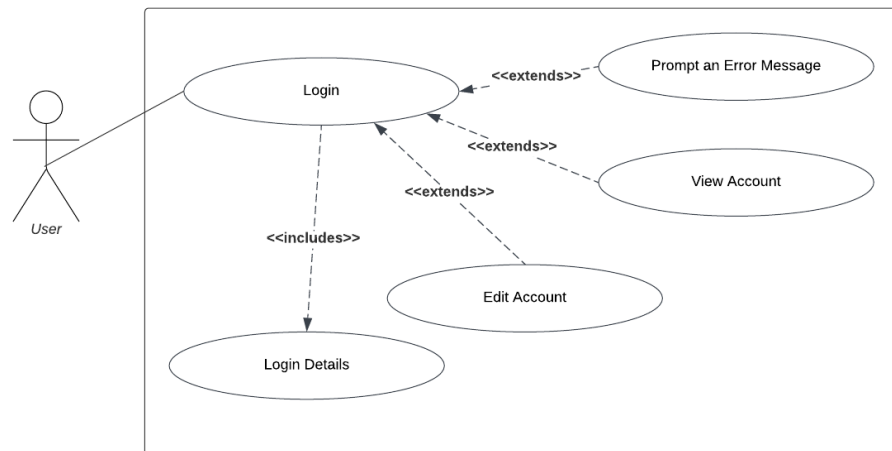


Figure 14. User Login Use Case

Name : User Login

Purpose : To allow users to login in their accounts

Triggering : Users

Benefiting : System

Pre-Condition : Input login information

Post-Condition : Users have login successfully.

Steps :

USER	SYSTEM
1. Input ID number 2. Input password 3. Click the login button	4. Validate input 4.1. If not valid, an error message will prompt. 4.2. If valid, redirect to the home page/dashboard.

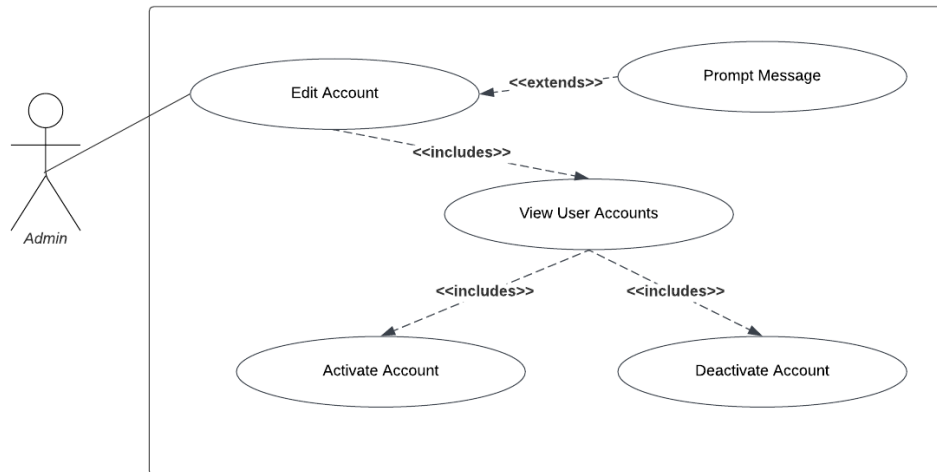


Figure 15. Edit User Accounts Use Case

Name	: Edit User Accounts
Purpose	: To allow the admin to activate and deactivate user accounts if needed
Triggering	: Admin
Benefiting	: Users
Pre-Condition	: Filled up all information needed in creating accounts.
Post-Condition	: Admin successfully activated and deactivated accounts.
Steps	:

ADMIN	SYSTEM
1. Click activate/deactivate button	2. Prompt confirmation message 2.1. If yes, the account is activated/deactivated. 2.2. If no, go back to the list of user accounts

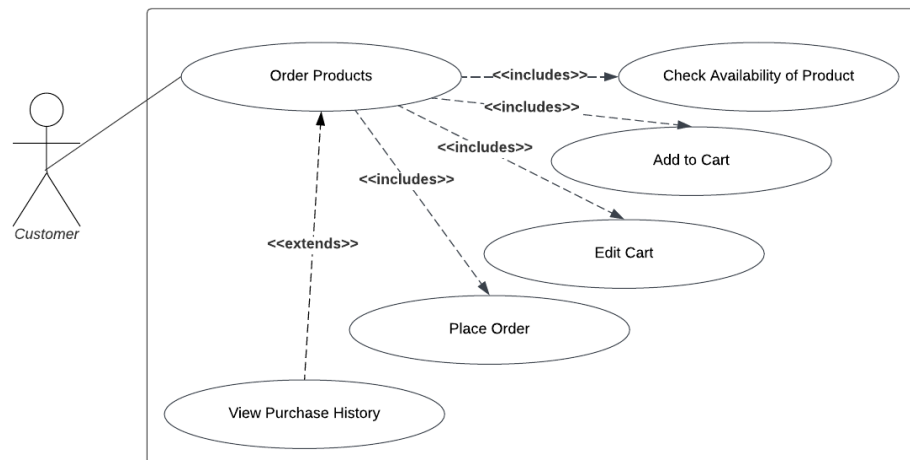


Figure 16. **Process Ordering of Product Use Case**

Name : Product Ordering
Purpose : To allow customers to order products
Triggering : Customer
Benefiting : Admin, Supplier
Pre-Condition : Input order details
Post-Condition : Order placed.
Steps :

CUSTOMER	SYSTEM
1. Select product 1.1. View product details 1.2. Click the size guide button 3. Click add to cart button 5. Choose size 5.1. Input quantity 5.2. Click Add to Cart button 7. View the cart 7.1. Select the cart item 7.2. Edit cart item 7.3. Remove the cart item	2. Prompt size guide picture 4. Prompt size selection and quantity 6. Redirect to the cart page 8. Prompt confirmation message 8.1. If yes, the cart item will be removed from the cart. 8.2. If no, back to the cart. 10. Redirect to the purchase history page

9. Click the purchase history button	
11. Click Place order	

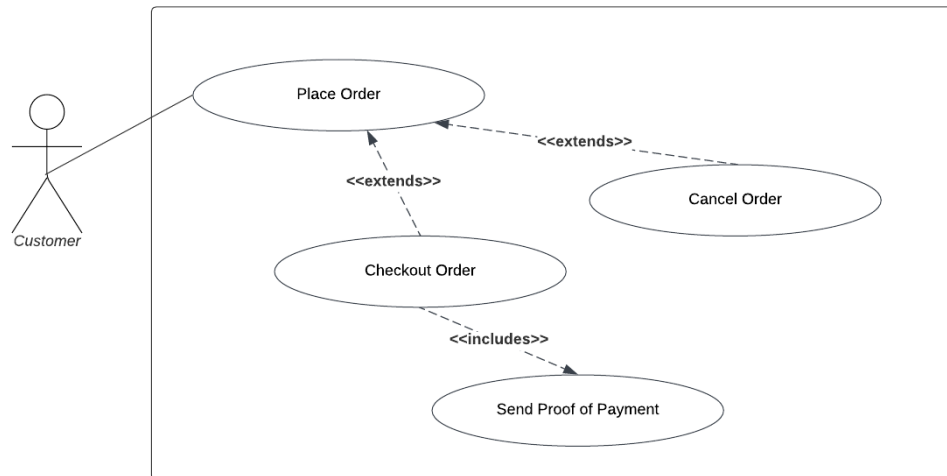


Figure 17. **Place Order Use Case**

Name : Place Order
Purpose : To allow customers to place their order
Triggering : Customer
Benefiting : Admin, Supplier
Pre-Condition : Placing of order
Post-Condition : Order checked out.
Steps :

CUSTOMER	SYSTEM
2. Upload proof of payment	1. Redirect to the checkout page.
3. Click the checkout button	4. Redirect to the shop page.

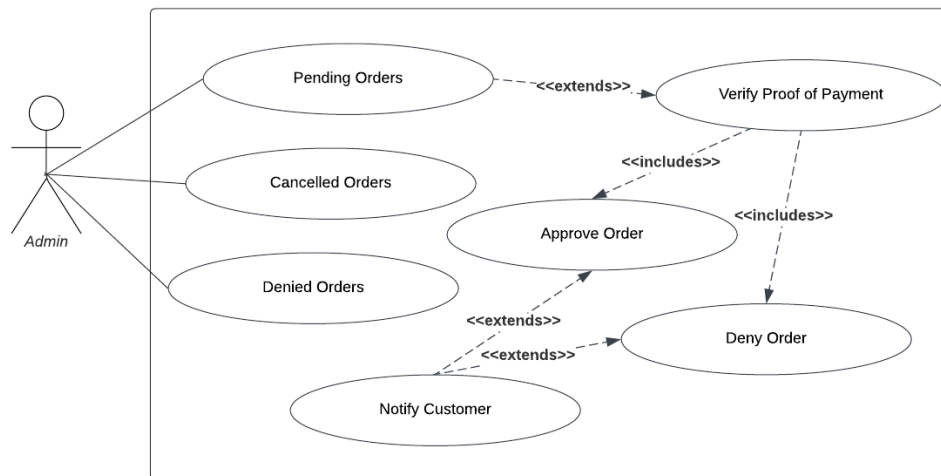


Figure 18. **Process Verification of Proof of Payment Use Case**

Name : Proof of Payment Verification

Purpose : To allow admin to verify customer's proof of payment

Triggering : Admin

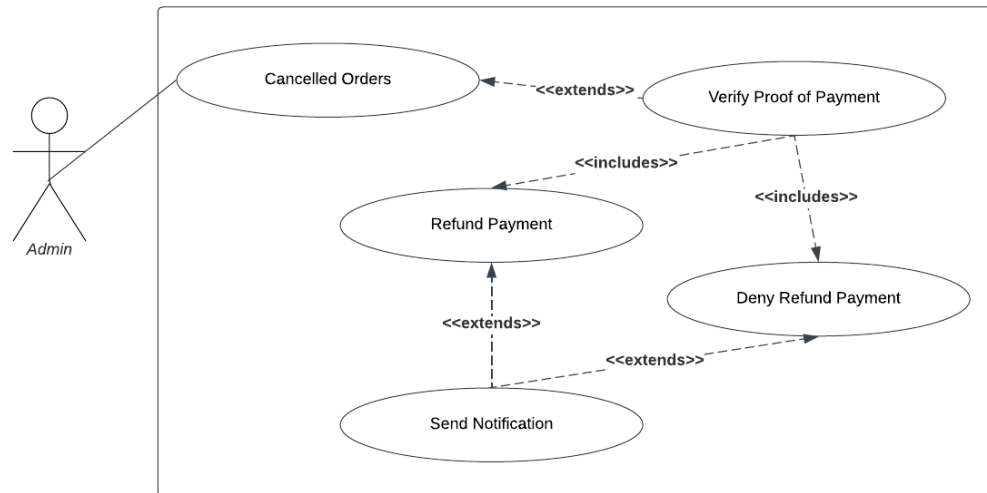
Benefiting : Customer, Supplier

Pre-Condition : Sending of proof of payment

Post-Condition : Notify customers if their order is either approved or denied

Steps :

ADMIN	SYSTEM
1. Click verify button 3. Click the back button 5. Click approve/deny button	2. Prompt order details 2.1. Click the view proof of payment 2.2. View proof of payment 4. Redirect to Order details 6. Prompt confirmation message 6.1. If yes, the order is approved/denied and automatically notified to the customer. 6.2. If no, back to order details.

Figure 19. Canceled Order Use Case

Name : Order Cancelled

Purpose : To allow admin to refund customer payment if they cancel their orders

Triggering : Admin

Benefiting : Customer

Pre-Condition : Pending Order

Post-Condition : Customer successfully canceled his/her order and got a refund.

Steps :

ADMIN	SYSTEM
1. Click the view button 3. Click the back button 5. Click the refund button 7. Click deny button	2. Prompts proof of payment picture 4. Back to the canceled orders page 6. Update order status to refunded order 6.1. Notify customer of order refund. 8. Update order status to denied order refund 8.1. Notify customer of denied order refund

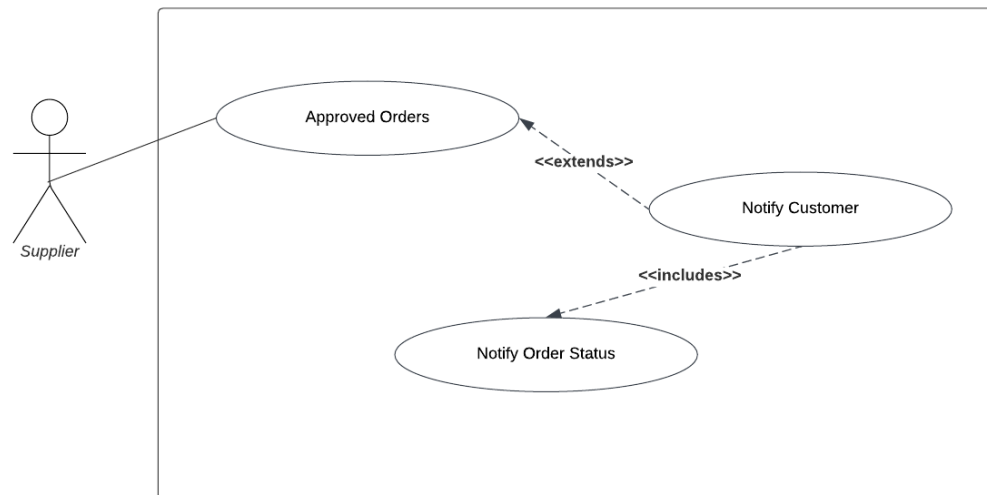


Figure 20. Process Order Tracking Use Case

Name : Order Tracking Notification
Purpose : To allow suppliers to notify customers of the status of their order
Triggering : Supplier
Benefiting : Customer
Pre-Condition : Order Approval
Post-Condition : Customer successfully claimed their order
Steps :

SUPPLIER	SYSTEM
1. Select order/s 2. Click order ready button 4. Click the Ready to Claim navigation button 5. View ready-to-claim orders 5.1. Click the claim order button	3. Updates order status to order ready 3.1. Notify customers of their order status 6. Updates order status to order claimed 6.1. Notify customers of their order status

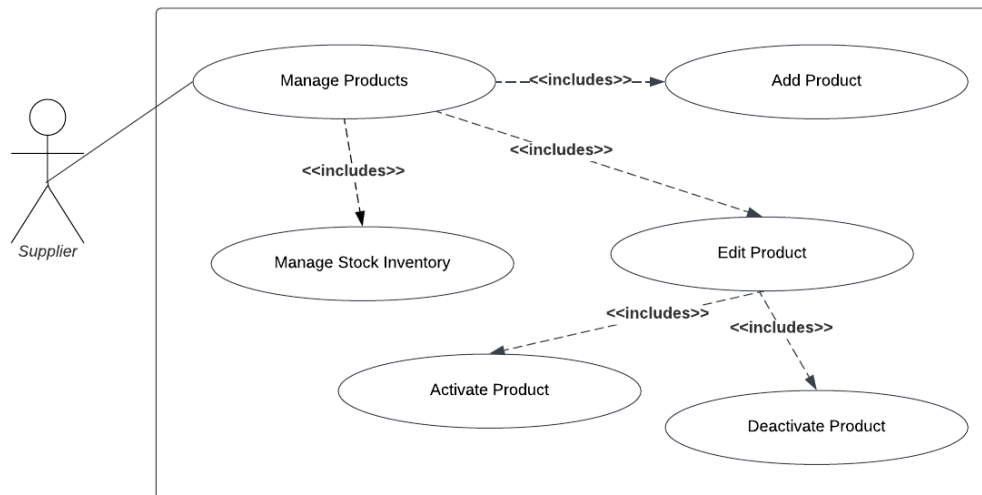


Figure 21. **Manage Product Use Case**

Name : Product Management

Purpose : To allow suppliers to add and edit their products and to manage stock

Triggering : Supplier

Benefiting : Customer

Pre-Condition : Inputted product information

Post-Condition : Supplier successfully added, activated, and/or deactivated their products and managed their stock inventory

Steps :

SUPPLIER	SYSTEM
1. Click add item button 3. Select the product type 4. Input item name 5. Input item description 6. Choose a department 7. Input price 8. Input quantity 9. Select available sizes 10. Select gender	2. Redirect to add item page 13. Redirect to the item page

11. Choose a category	
12. Click add/cancel item button	

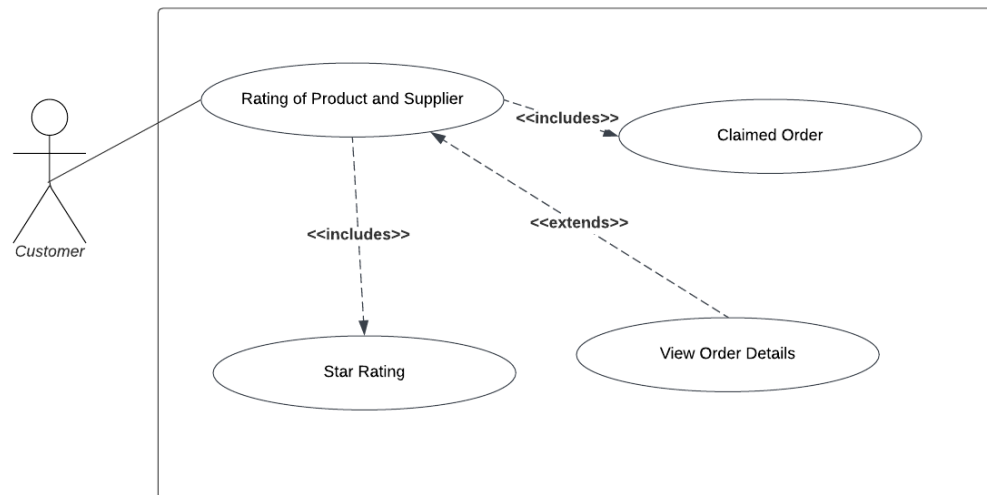


Figure 22. **Process of Rating of Product and Supplier**

Name : Product and Supplier Rating
Purpose : To allow the customer to rate their ordered product and the supplier
Triggering : Customer
Benefiting : Supplier, Admin
Pre-Condition : Claimed Order
Post-Condition : Improve Order and Product Handling
Steps :

CUSTOMER	SYSTEM
1. View notification	3. Prompt order details
2. Click claimed order	4. Prompt rating star button
5. Choose star rating button	
6. Click submit	

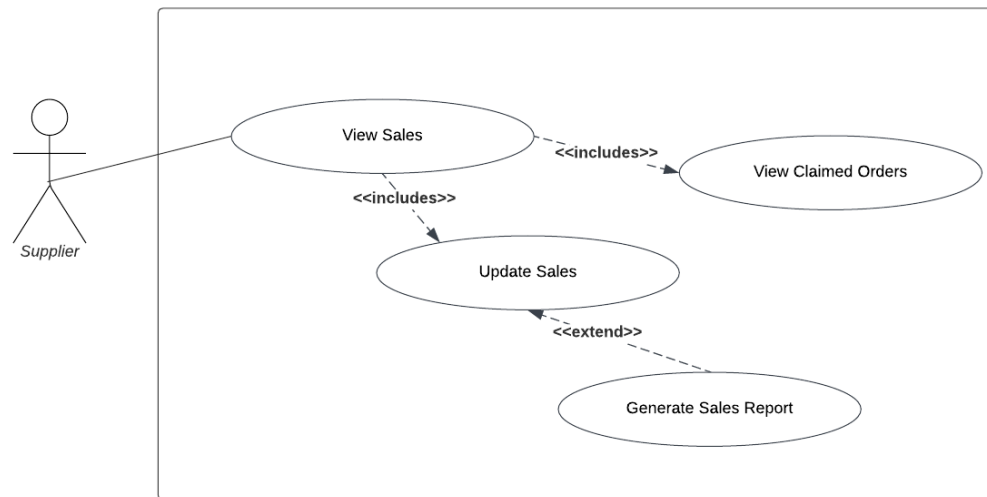


Figure 23. **Generate Reports Use Case**

Name : Sales Analytics
Purpose : To allow the supplier to view their sales and generate a report
Triggering : Supplier
Benefiting : Admin
Pre-Condition : Selling of Products
Post-Condition : Improve sales
Steps :

SUPPLIER	SYSTEM
1. View total sales 2. View the total number of claimed orders 3. View the number of items sold by product 4. Click the export button 6. Click claimed navigation button 8. View claimed orders	4. Generate report through Excel file 7. Redirect to the claimed orders page

High-Level Design

This part visually depicts the system in operation, intending to enhance usability and user experience. It visually displays the capabilities of users and administrators and demonstrates how users can interact with a computer (website).

Module Name: Default Page

Screen No: 1.1

Screen Name: Login Page

Description:

Through a login page, users can access the website using their account.

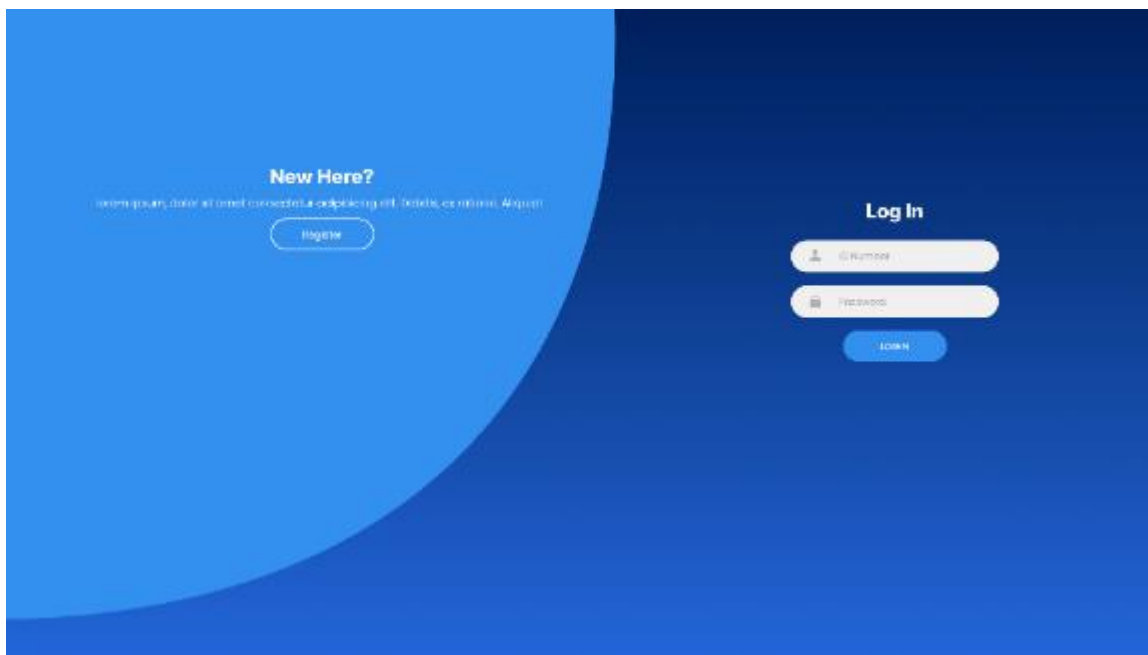


Figure 24. **Login Page**

Items	Type	Required	Data Type	Size
ID Number	Textbox	Yes	Varchar	8
Password	Textbox	Yes	Varchar	50
Login	Button	Yes		
Register	Button	Yes		

LOGIC:

1. Fill up User's details

1.1 If one of the fields is empty, an Error message is displayed.

2.1 If the account does not exist, an error message is displayed.

3. the user can access the website without issues if the account exists.

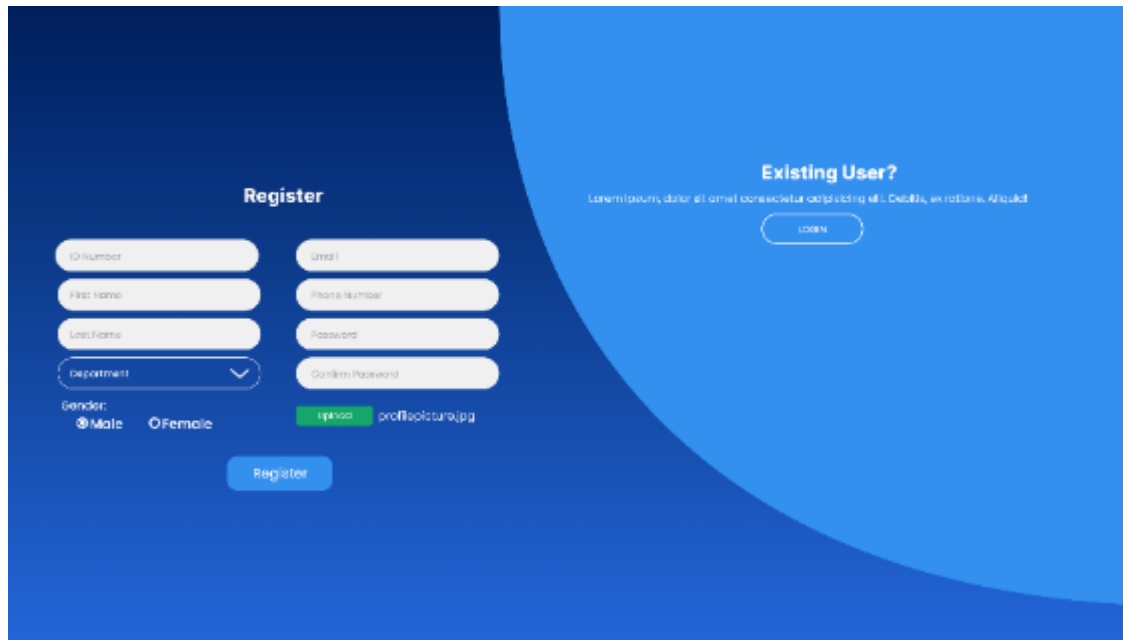
Module Name: Default Page

Screen No: 1.2

Screen Name: Register Page

Description:

Users can independently create an account through a signup page and gain access to the system and its services.



The image shows a user registration form on a dark blue background. The form is titled "Register" and contains several input fields: "ID Number", "Email", "First Name", "Phone Number", "Last Name", "Password", and "Confirm Password". There is also a "Department" dropdown menu and "Gender" radio buttons for "Male" and "Female". A "Register" button is at the bottom. To the right, there is a section titled "Existing User?" with a "Login" button. The background features a large, light blue curved shape on the right side.

Register

ID Number:

Email:

First Name:

Phone Number:

Last Name:

Department:

Gender: ☒ Male ☐ Female

Password:

Confirm Password:

Existing User?

Lorem ipsum, dolor sit amet consectetur adipiscing elit. Donec, ex nunc. Aliquam

Figure 25. **Register Page**

Items	Type	Required	Data Type	Size
ID Number	Textbox	Yes	INT	8
First Name	Textbox	Yes	Varchar	50
Last Name	Textbox	Yes	Varchar	50
Department	Dropdown	Yes		
Gender	Radio Button	Yes		
Email	Textbox	Yes	Varchar	50
Phone Number	Textbox	Yes	INT	11
Password	Textbox	Yes	Varchar	50
Image	Button	No	Nvarchar	max
Register	Button	Yes		
Login	Button	Yes		

LOGIC:

1. Fill up User's details

1.1 If one of the fields is empty, an Error message is displayed.

1.2 The user cannot proceed with the signup process if the ID number is already in the website's database. An error is displayed.

2. Once the signup button is clicked, the user's details will be stored in the database, confirming the successful creation of their account.

2.1 Fields reset to their default values, and a pop-up message indicates that the user has successfully created an account.

3. Users can now proceed to the sign-in page after successfully creating an account.

Module Name: Default Page

Screen No: 1.3

Screen Name: Home Page

Description:

Upon entering the UNITEE website, the users will be greeted with a modern and user-friendly interface that showcases an extensive collection of school apparel for various departments.



Figure 26. Home Page

Items	Type	Required	Data Type	Size
Website Logo	Button	Yes		
Shop Now	Button	Yes		
Cart Icon	Button	Yes		
Shop Icon	Button	Yes		
Notification Icon	Button	Yes		
Profile Icon	Button	Yes		
Logout Icon	Button	Yes		
Product Image	Picturebox	Yes	NVarchar	/
Footer: Image logo	Picturebox	Yes		
Footer: Utility Links	Links	Yes		

LOGIC:

1. The user now has access to the website.
2. The navigation bar shows the card, shop, notification, and profile icons that can redirect to their specific web pages and a logout button to log out of the account.
3. To advertise new products and best-selling products.
4. The “shop now” button redirects users to the shop webpage.
5. Footer contains utility links informing users about the website's information, terms of service, and policies.

Module Name: Shop

Screen No: 2.1

Screen Name: View Products

Description:

The shop contains various apparel available to all students, staff, and parents. A sorting filter feature is prominently displayed on the top of the products available. Users can easily customize the browsing experience making it effortless to narrow down their search and locate desired items and filtering by department, type, and gender.

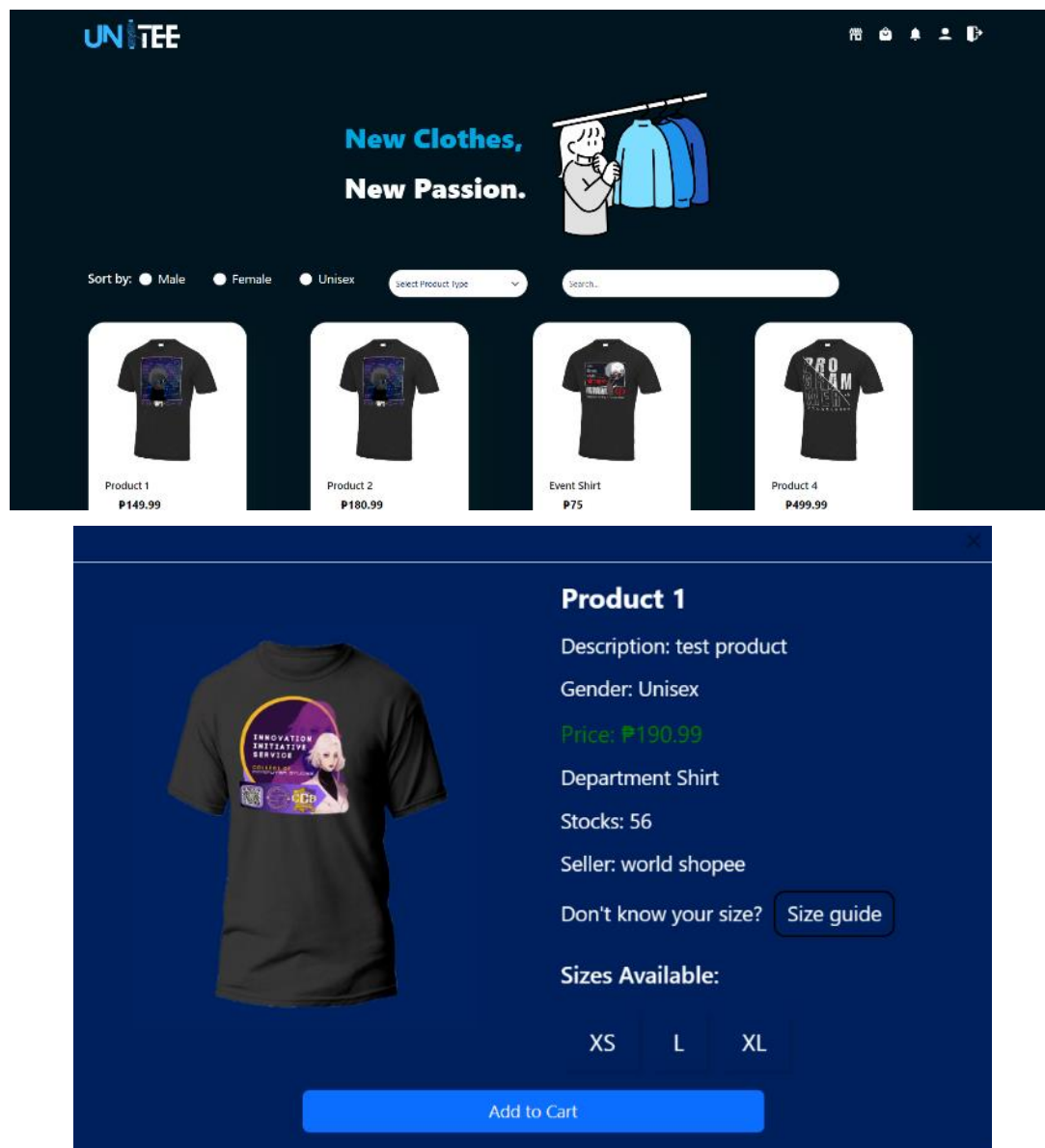


Figure 27. View Products

Items	Type	Required	Data Type	Size
Product Type	Dropdown	Yes		
Search	Textbox	Yes	Varchar	50
Product Image	Picturebox	Yes	Nvarchar	
Product Name	Label	Yes	Varchar	50
Product Description	Label	Yes	Varchar	100
Price	Label	Yes	Float	
Sizes Available	Label	Yes	Varchar	50
Available Stocks	Label	Yes	INT	4
Size Guide	Button	Yes		
Rating	Star Button	Yes		

LOGIC:

1. When users choose an item on the homepage, they will be redirected to the corresponding product panel.
2. The system will display information regarding the selected product, including its product details, availability of stocks and sizes, and customer ratings. Additionally, users can refer to the size guide to find their preferred sizes.
3. Once the user is satisfied with the product, they can click the "add to cart" button to select their desired sizes and quantities.

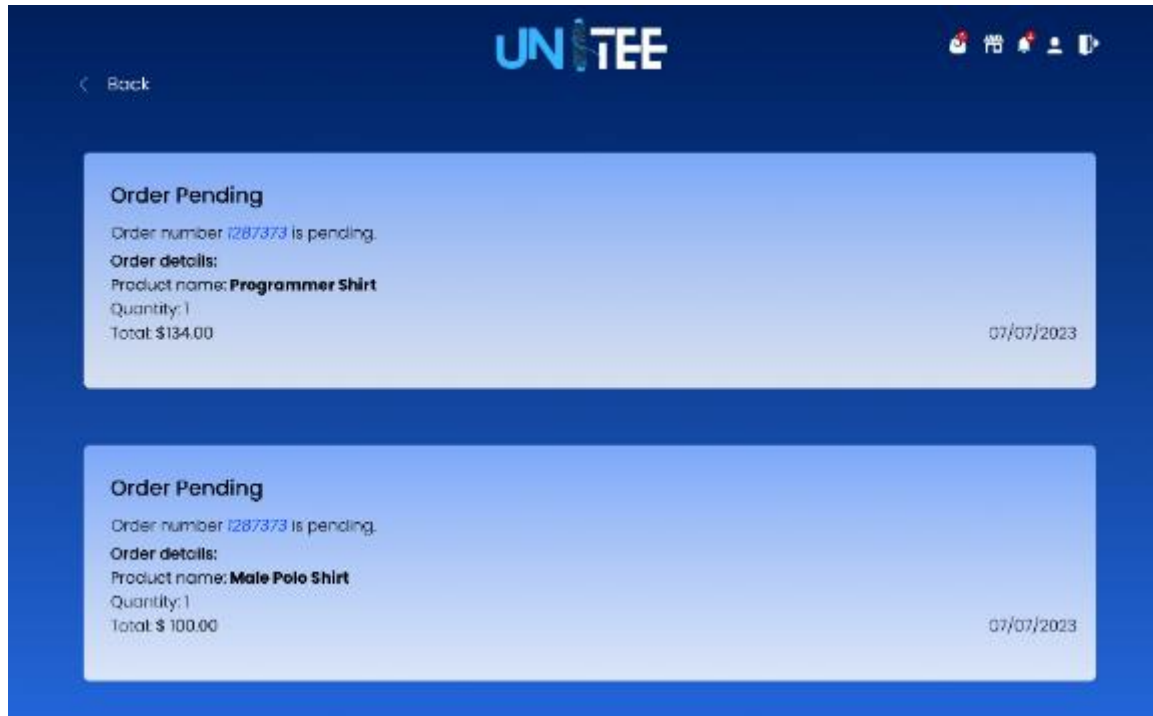
Module Name: Notification

Screen No: 3.1.1

Screen Name: Notification Pending

Description:

It shows the pending order's essential details, namely the order number, item list, number of items, total payment, payment option, and date.



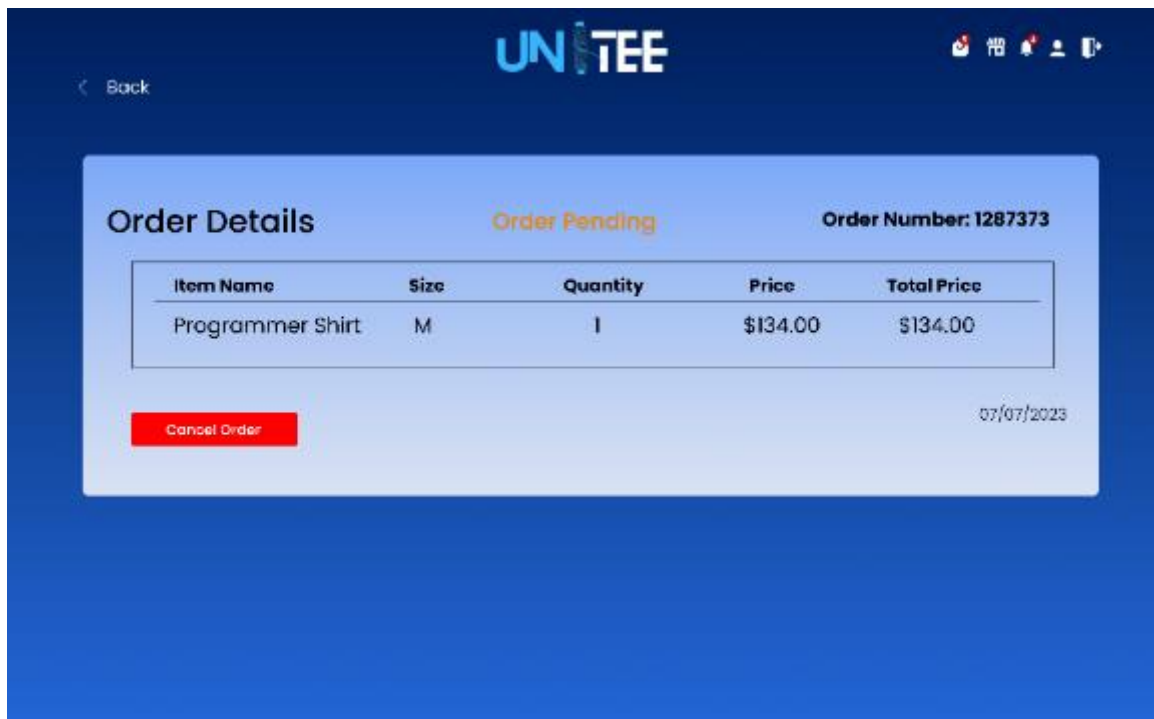


Figure 28. Notification Pending

Items	Type	Required	Data Type	Size
Order Status	Label	Yes	Varchar	50
Order Description	Label	Yes		
Product Name	Label	Yes	Varchar	
Quantity	Label	Yes	Int	
Total	Text	Yes	Float	11
Back	Button	Yes		
Date	Label	Yes	DateTime	
Order number	Label	Yes	Int	

Cancel	Button	Yes		
--------	--------	-----	--	--

LOGIC:

1. When the user clicks the notification icon from the navigation bar, it will redirect the user to the notification page containing the pending order details and status.

1.1 If the customer wants to cancel the order, the customer must click the “Cancel Order.”

Module Name: Notification

Screen No: 3.1.2

Screen Name: Notification Denied

Description: It shows the denied order's essential details.

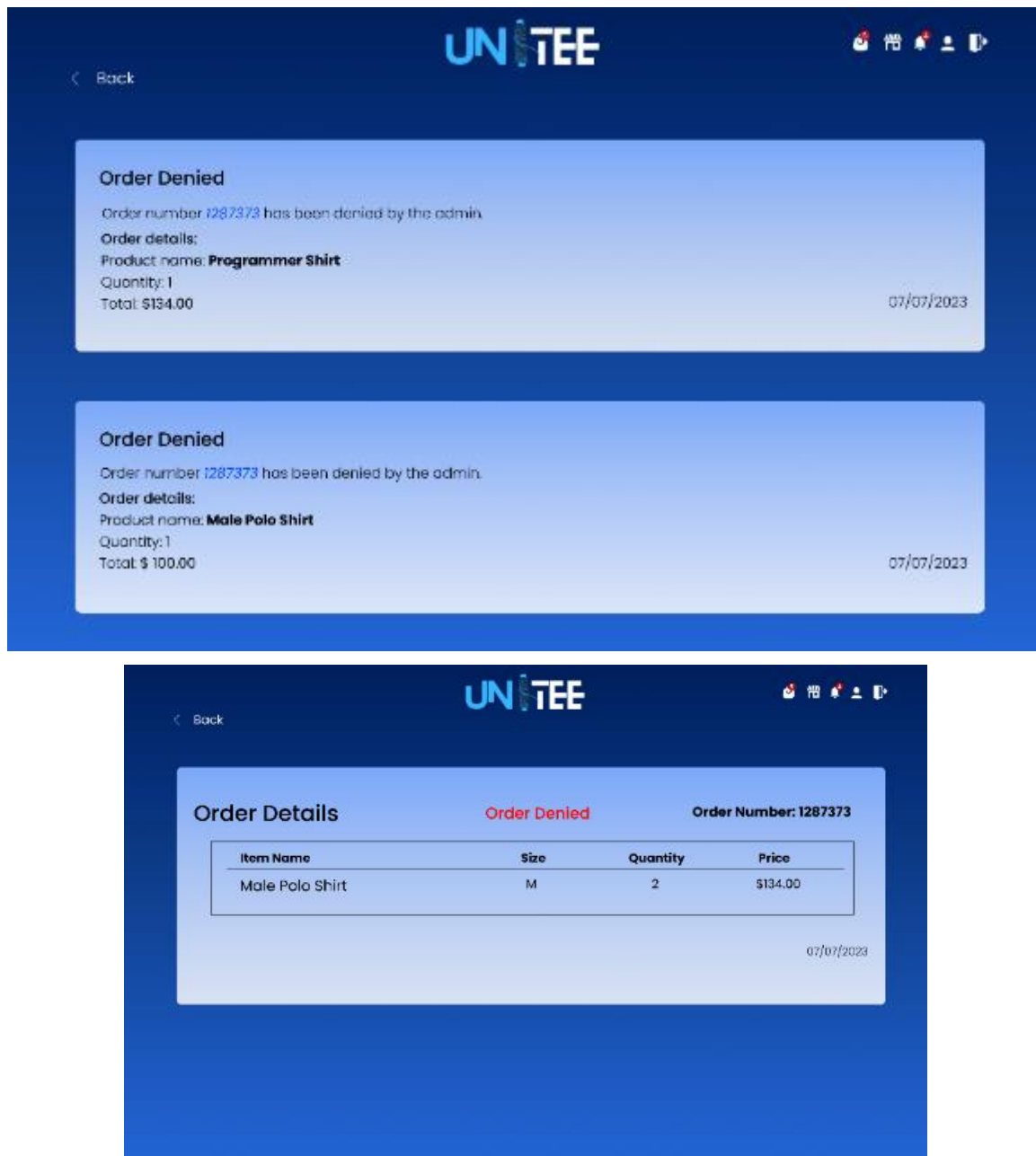


Figure 29. Notification Denied

Items	Type	Required	Data Type	Size
Order Status	Label	Yes	Varchar	50
Order Description	Label	Yes		
Product Name	Label	Yes	Varchar	
Quantity	Label	Yes	Int	
Total	Text	Yes	Float	11
Back	Button	Yes		
Date	Label	Yes	DateTime	
Order number	Label	Yes	Int	

LOGIC:

1. If the order was done mistakenly, a notification will promptly inform the customer that the order has been denied.

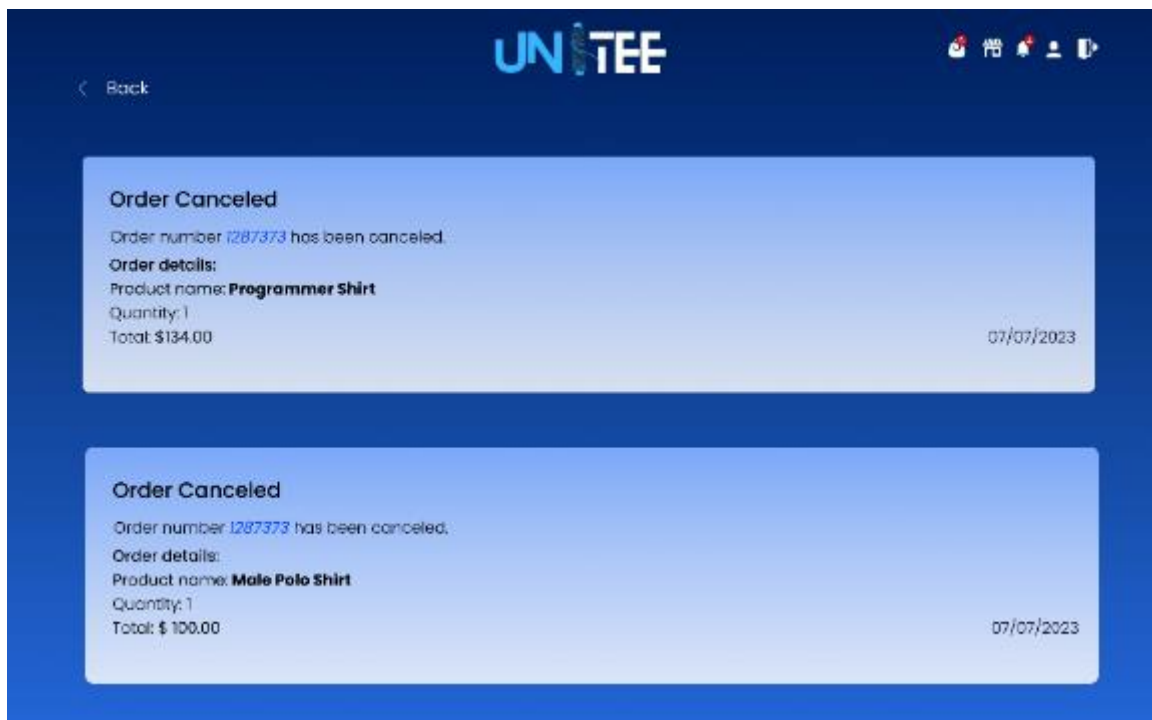
Module Name: Notification

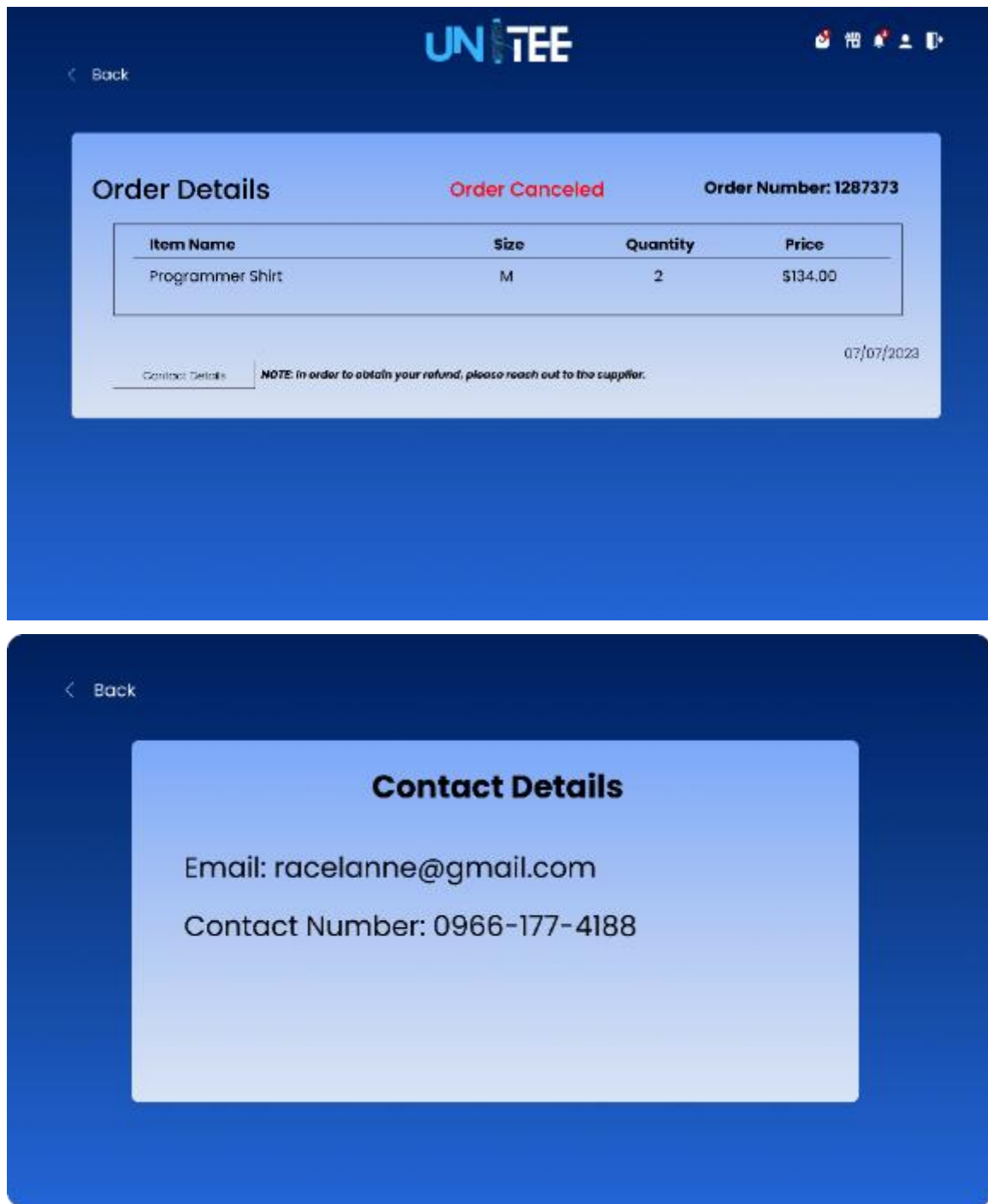
Screen No: 3.1.3

Screen Name: Notification Canceled

Description:

It shows the canceled order's essential details and the contact details to contact the admin for a refund.



Figure 30. Notification Canceled

Items	Type	Required	Data Type	Size
-------	------	----------	-----------	------

Order Status	Label	Yes	Varchar	50
Order Description	Label	Yes		
Product Name	Label	Yes	Varchar	
Quantity	Label	Yes	Int	
Total	Text	Yes	Float	11
Back	Button	Yes		
Date	Label	Yes	DateTime	
Order number	Label	Yes	Int	
Contact Details	Button	Yes		
Email	Label	Yes	Varchar	
Contact Number	Label	Yes	Varchar	

LOGIC:

1. If the order was canceled, the customer can contact you by clicking the “contact details” button to display the contact information.

Module Name: Notification

Screen No: 3.1.4

Screen Name: Notification Approved

Description:

Once the administrator approves the order, the user can expect to receive a notification containing the receipt.

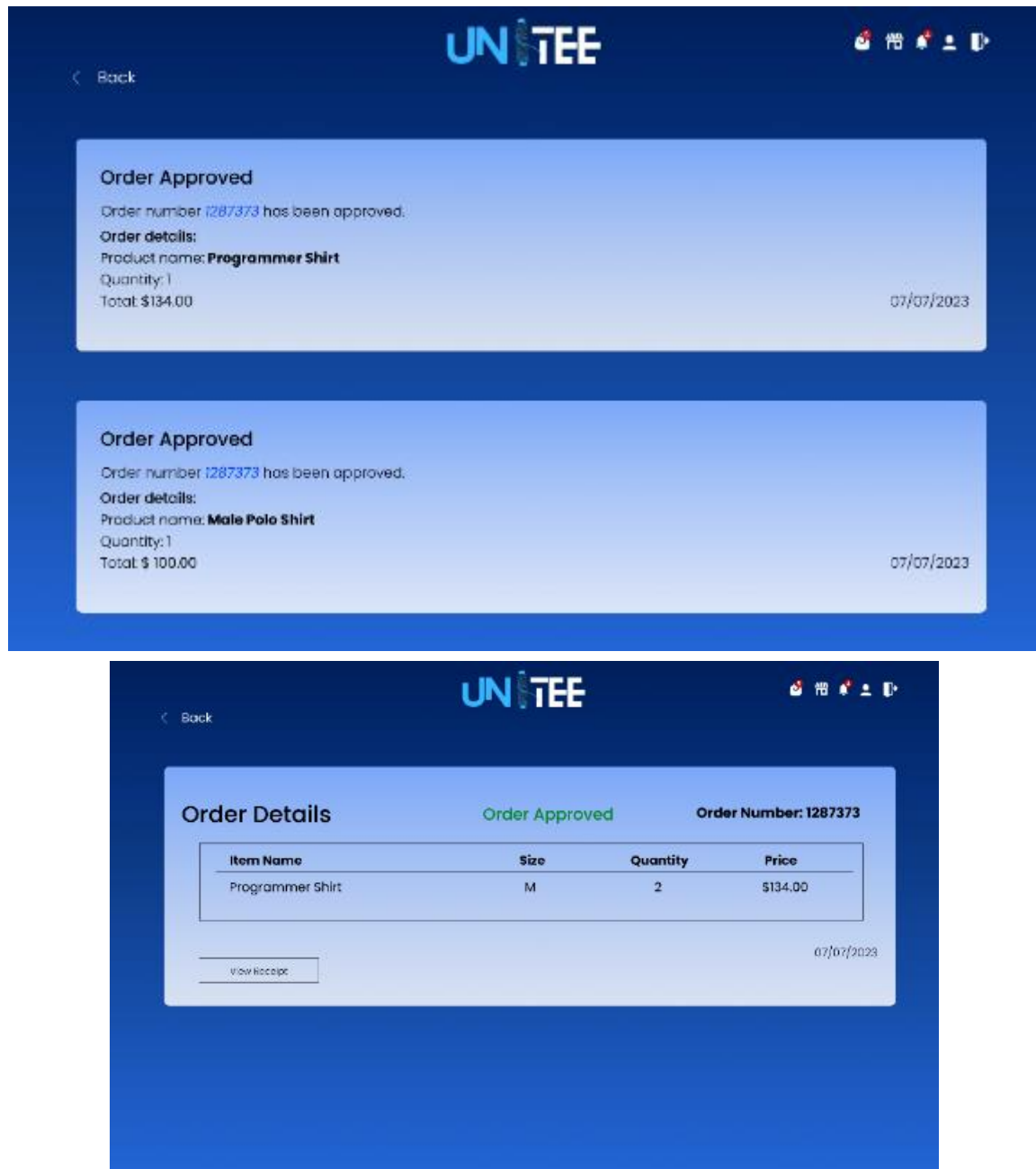


Figure 31. Notification Approved

Items	Type	Required	Data Type	Size
Order Status	Label	Yes	Varchar	50
Order Description	Label	Yes		
Product Name	Label	Yes	Varchar	
Quantity	Label	Yes	Int	
Total	Text	Yes	Float	11
Back	Button	Yes		
Date	Label	Yes	DateTime	
Order number	Label	Yes	Int	
View Receipt	Button	Yes		

LOGIC:

1. A notification will promptly inform the customer that the order has been approved.

Module Name: Notification

Screen No: 3.1.5

Screen Name: Order Receipt

Description:

It shows the order's essential details, especially the order number used for an order claiming verification.

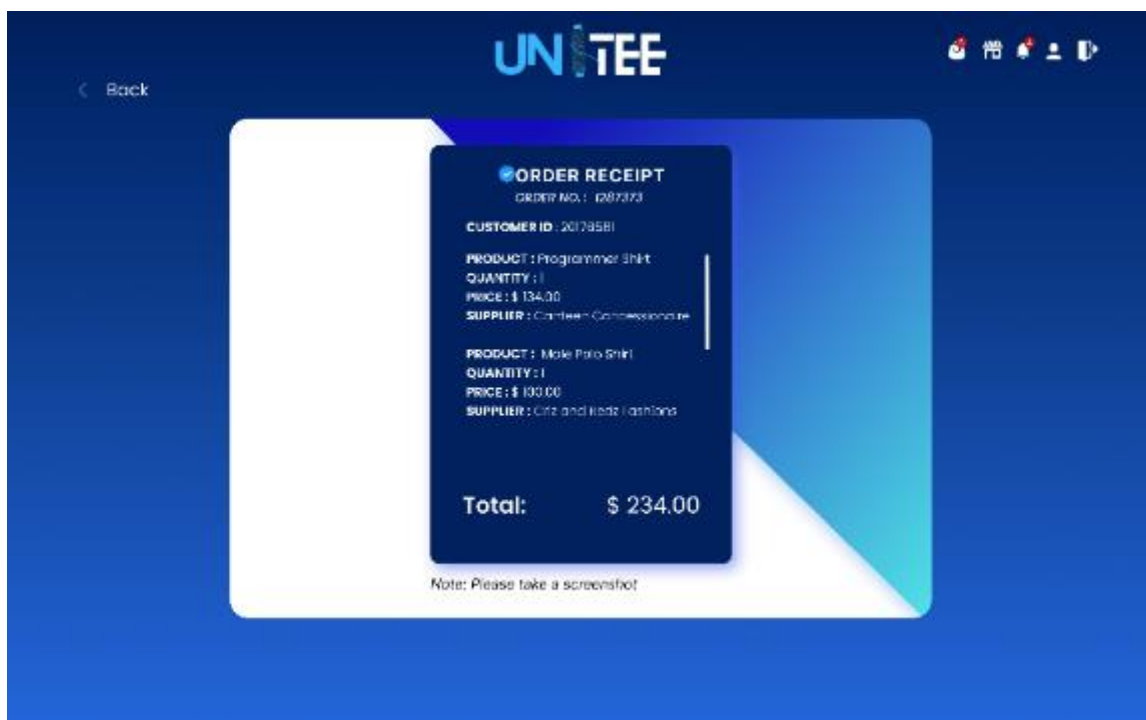


Figure 32. **Order Receipt**

Items	Type	Required	Data Type	Size
Order Receipt Header	Label	Yes		
Order Number	Label	Yes		
Product Name	Label	Yes	Varchar	
Quantity	Label	Yes	Int	
Price	Label	Yes	Float	11

Supplier	Label	Yes	Varchar	50
Total	Text	Yes	Float	11
Back	Button	Yes		

LOGIC:

1. An order receipt will be sent to the customer to verify when they want to claim the order.

Module Name: Notification

Screen No: 3.1.6

Screen Name: Notification Ready to Claim

Description:

It shows the ready-to-claim order's essential details along with the order receipt.

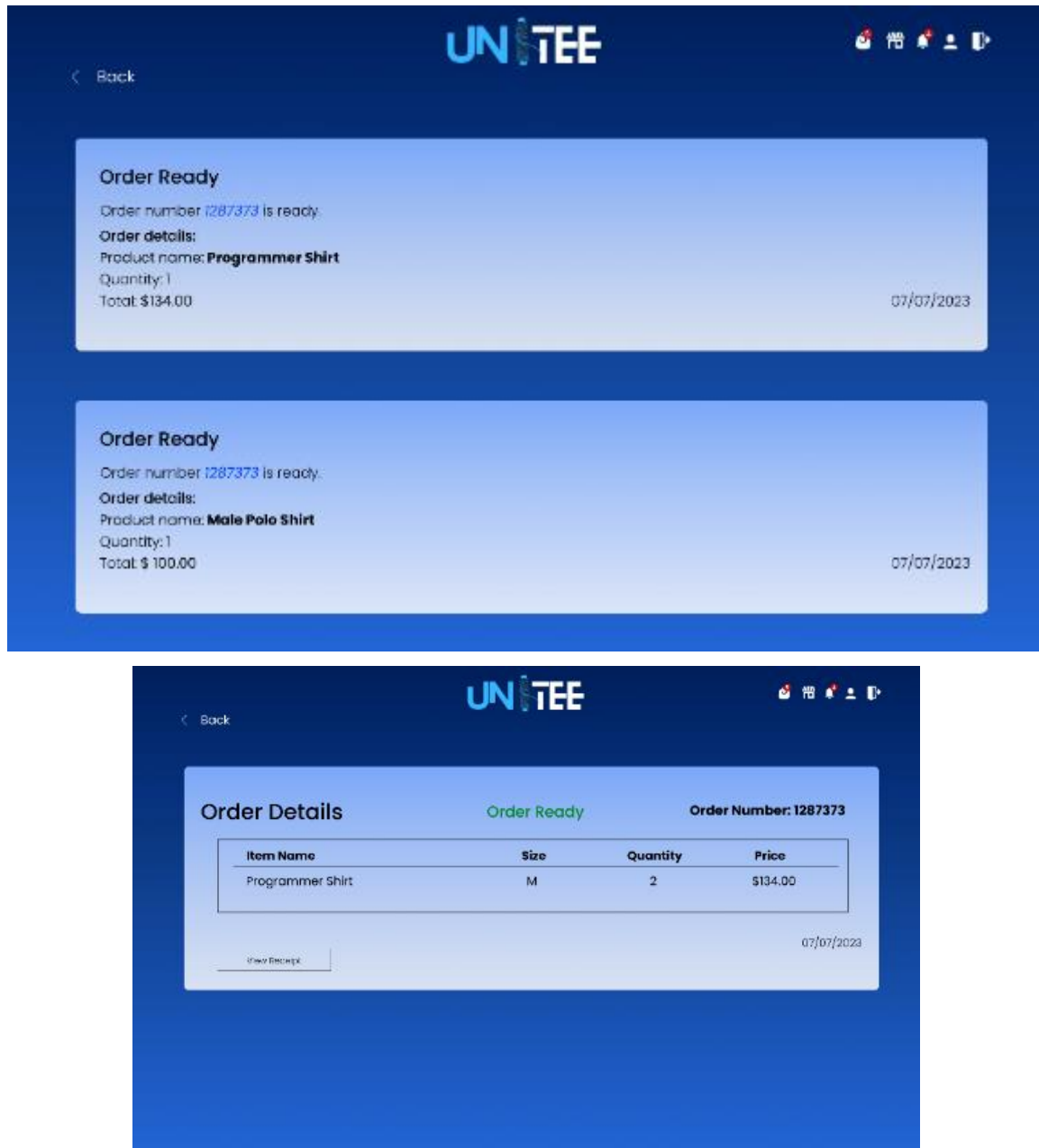


Figure 33. Notification Ready to Claim

Items	Type	Required	Data Type	Size
Order Status	Label	Yes	Varchar	50
Order Description	Label	Yes		
Product Name	Label	Yes	Varchar	
Quantity	Label	Yes	Int	
Total	Text	Yes	Float	11
Back	Button	Yes		
Date	Label	Yes	DateTime	
Order number	Label	Yes	Int	
View Receipt	Button	Yes		

LOGIC:

1. After placing the order, the customer will receive a receipt to confirm the preferred claiming time.

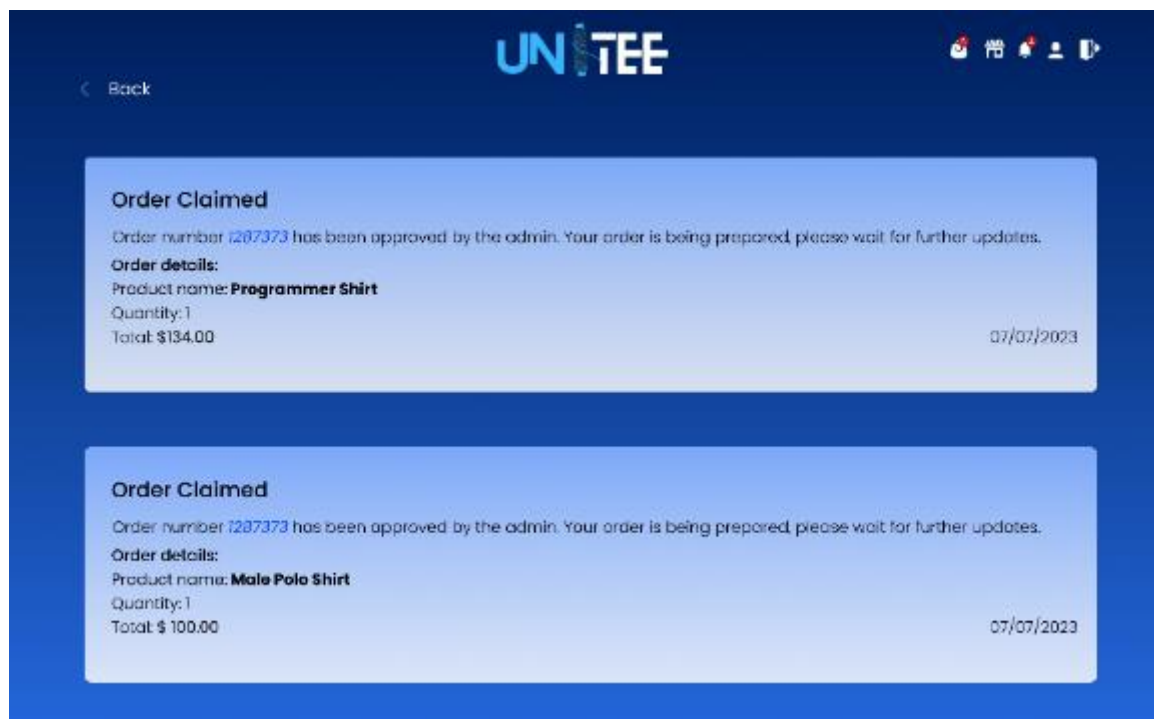
Module Name: Notification

Screen No: 3.1.7

Screen Name: Notification Claimed

Description:

The display will present crucial information regarding the order, including the order number, itemized list, quantity of items, total payment, and date. Furthermore, it will show the recipient's name and the item so the user may submit feedback.



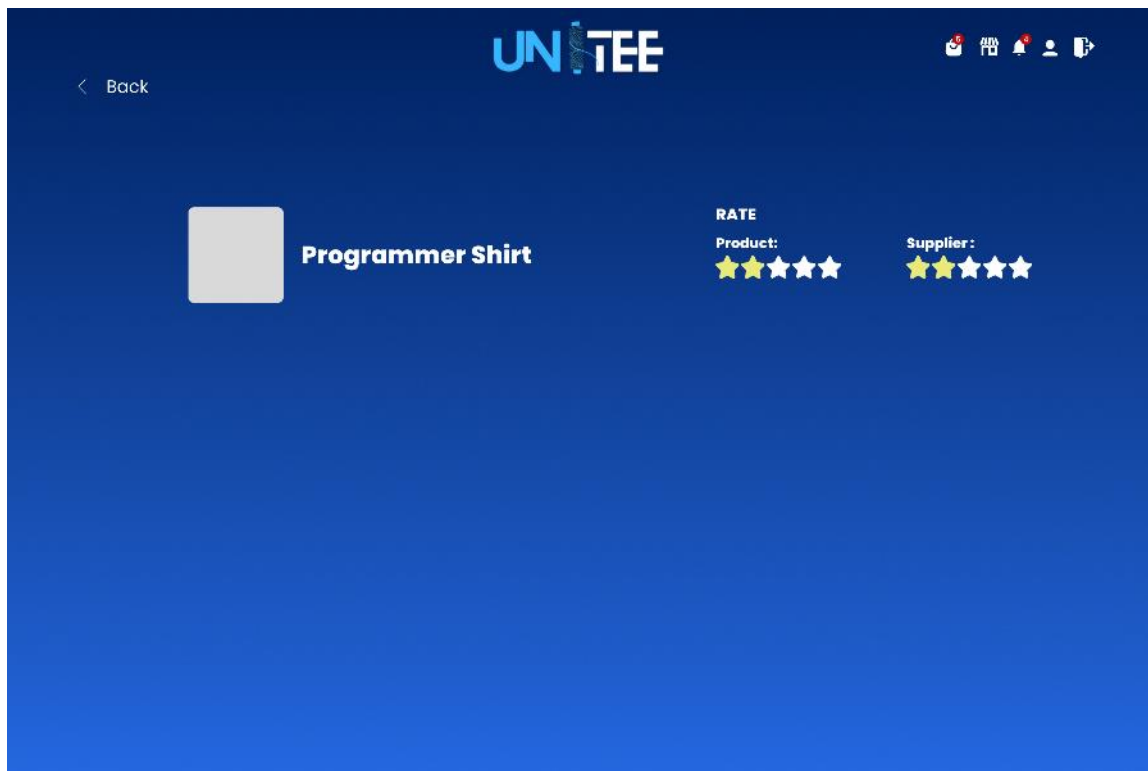


Figure 34. Notification Claimed

Items	Type	Required	Data Type	Size
Order Status	Label	Yes	Varchar	50
Order Description	Label	Yes		
Product Name	Label	Yes	Varchar	
Quantity	Label	Yes	Int	
Total	Text	Yes	Float	11
Back	Button	Yes		
Date	Label	Yes	DateTime	
Star Button	Button	Yes		

Comments	Textbox	Yes	Varchar	200
Submit	Button	Yes		

LOGIC:

1. The customer will receive a notification once their order's status is updated.
2. Customers have the option to provide feedback about the product after purchasing it.

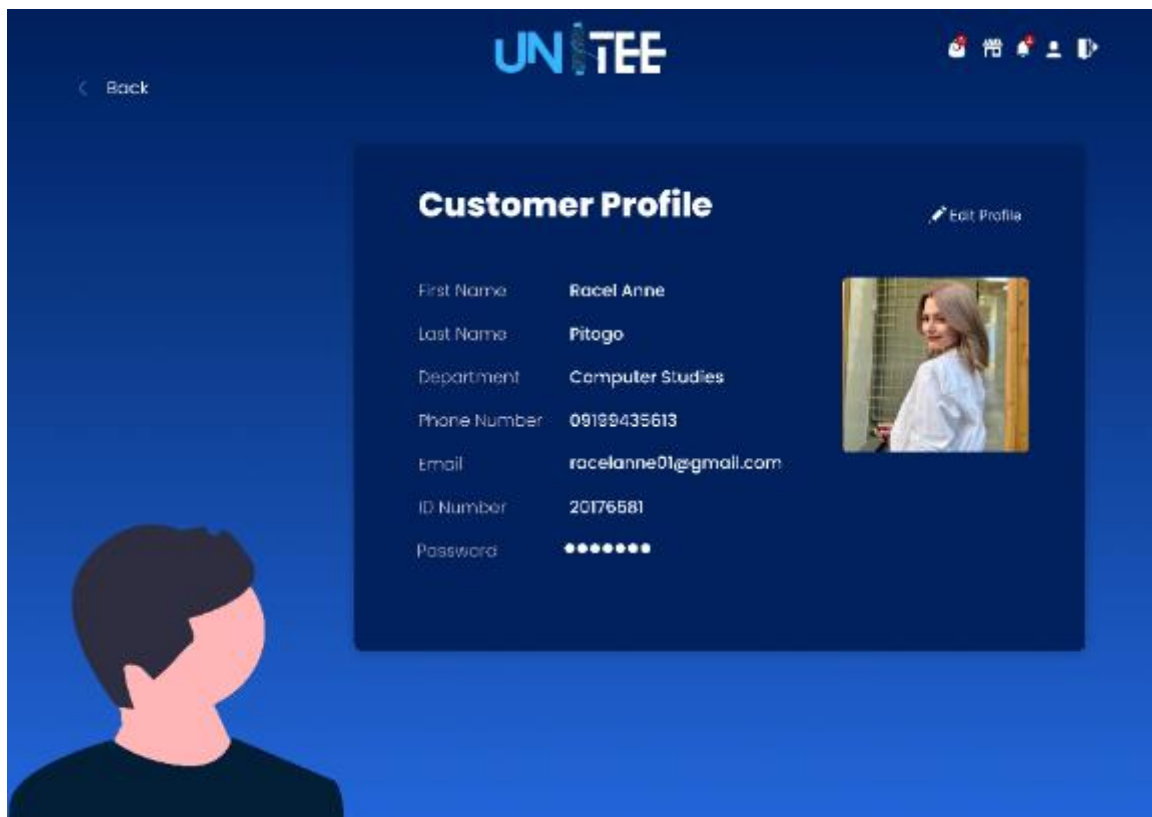
Module Name: Profile

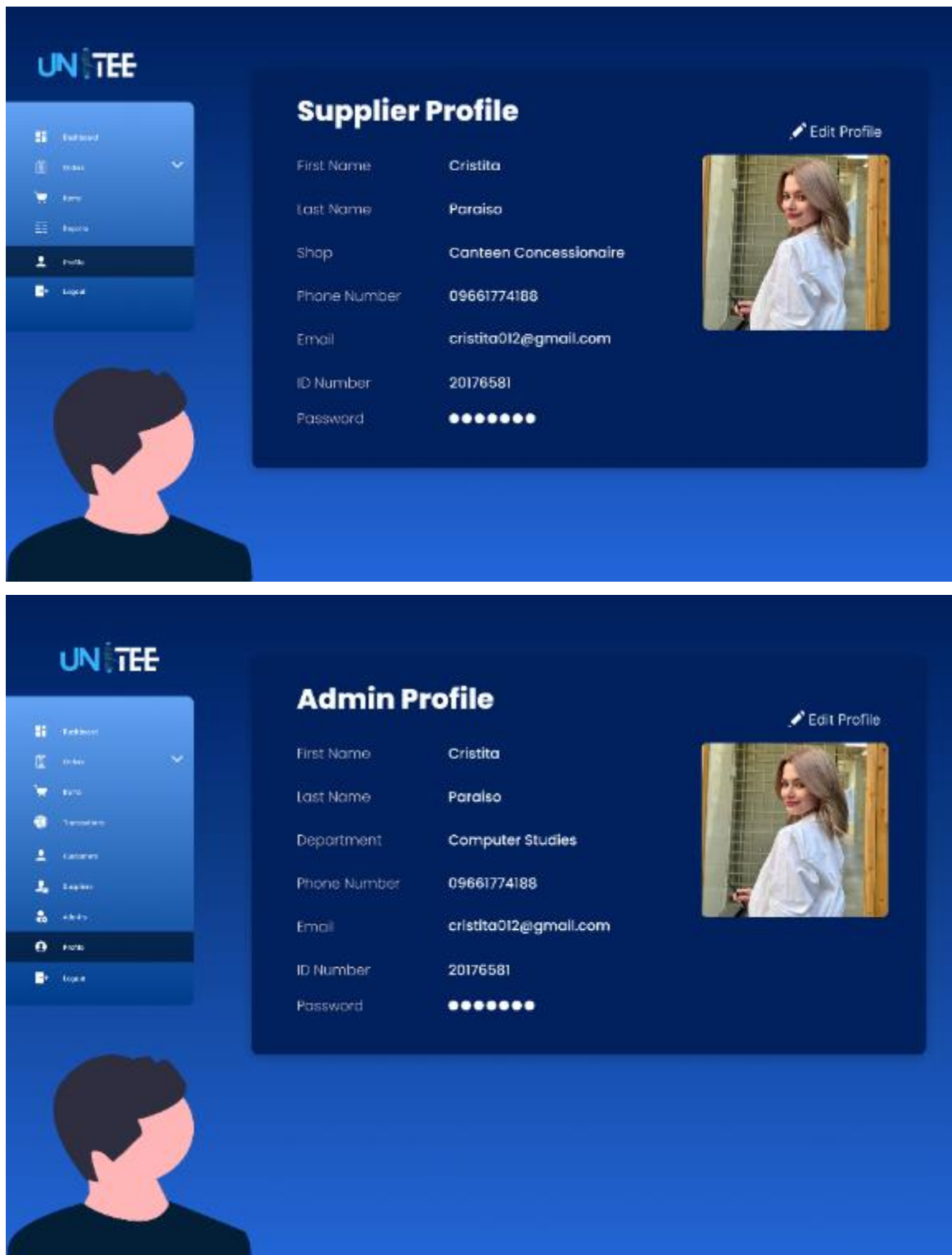
Screen No: 4.1

Screen Name: View Profile

Description:

The user's profile is displayed, which includes essential details about the user.



Figure 35. View Profile

Items	Type	Required	Data Type	Size
First name	Label	Yes	Varchar	50
Last name	Label	Yes	Varchar	50
Shop name	Label	Yes	Varchar	50
Email	Label	Yes	Varchar	50
Phone Number	Label	Yes	INT	11
ID Number	Label	Yes	INT	8
Department	Label	Yes	Varchar	50
Password	Label	Yes	Varchar	12
Profile Picture	Picturebox	Yes		
Edit Profile	Button	Yes		

LOGIC:

1. The customer, supplier, and admin can view their profile containing their profile details.

Module Name: Profile

Screen No: 4.2

Screen Name: Edit Profile

Description:

The user can edit their profile details.

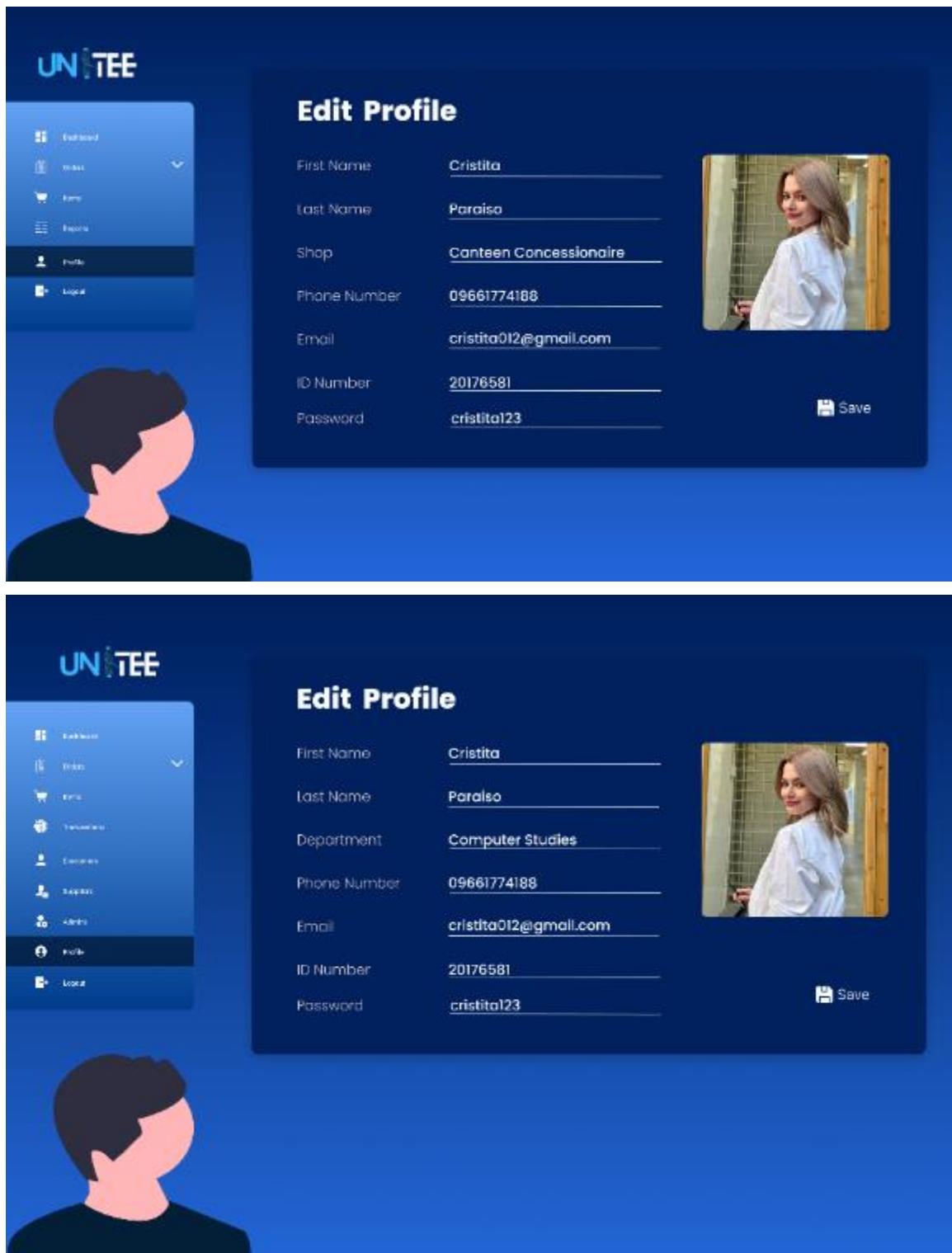
UNITEE

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Edit Profile

First Name	Racel Anne
Last Name	Pitogo
Department	Computer Studies
Phone Number	09189435613
Email	racelanne01@gmail.com
ID Number	20176581
Password	race1123

Save




UNITEE

Dashboard
Index
Form
Reports
Profile
Logout

Edit Profile

First Name	<u>Cristita</u>
Last Name	<u>Paraiso</u>
Shop	<u>Canteen Concessionaire</u>
Phone Number	<u>09661774188</u>
Email	<u>cristita012@gmail.com</u>
ID Number	<u>20176581</u>
Password	<u>cristita123</u>




 Save

UNITEE

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Edit Profile

First Name	<u>Cristita</u>
Last Name	<u>Paraiso</u>
Department	<u>Computer Studies</u>
Phone Number	<u>09661774188</u>
Email	<u>cristita012@gmail.com</u>
ID Number	<u>20176581</u>
Password	<u>cristita123</u>




 Save

Figure 36. Edit Profile

Items	Type	Required	Data Type	Size
First name	Textbox	Yes	Varchar	50
Last name	Textbox	Yes	Varchar	50
Shop name	Textbox	Yes	Varchar	50
Email	Textbox	Yes	Varchar	50
Phone Number	Textbox	Yes	INT	11
ID Number	Textbox	Yes	INT	8
Department	Textbox	Yes	Varchar	50
Password	Textbox	Yes	Varchar	12
Profile Picture	Picturebox	Yes		
Save	Button	Yes		

LOGIC:

1. The customer, supplier, and admin can edit their profile containing their profile details.

Module Name: Cart

Screen No: 5.1

Screen Name: Add Product

Description:

To purchase an item, shoppers can simply head to the store page and select the desired product, where they can customize the order and then proceed to add it to their cart by clicking the designated button.

Figure 37. Add Product

Items	Type	Required	Data Type	Size
Item Name	Label	Yes	Varchar	50
Product Type	Label	Yes	Varchar	50
Available Stocks	Label	Yes	Int	11
Size	Radio Button	Yes		

Quantity	Number Picker	Yes	INT	8
Add To Cart	Button	Yes		

LOGIC:

1. To make a purchase, the user needs to select an item they desire from the shop page and then proceed to click on the "add to cart" button.
 - 1.1. An item details panel will be displayed containing the item name, department, price, available stocks, size, and quantity.
 - 1.2. The user must choose their preferred size and the number of items they want to purchase.
2. Once the product details have been settled, they can proceed to click on the "add to cart" button and store the item in the cart.
3. If the user does not want to purchase the product, they can simply click the close button and choose a different product.

Module Name: Cart

Screen No: 5.2

Screen Name: View Cart

Description:

Displays the products added to the cart by the customer. The customer can either select all items or select a few items that they prefer to place the order. Additionally, each selected item will be displayed on the item list containing the item name, size, quantity, and price. A total amount will be calculated once the user selects the products they wish to place the order.

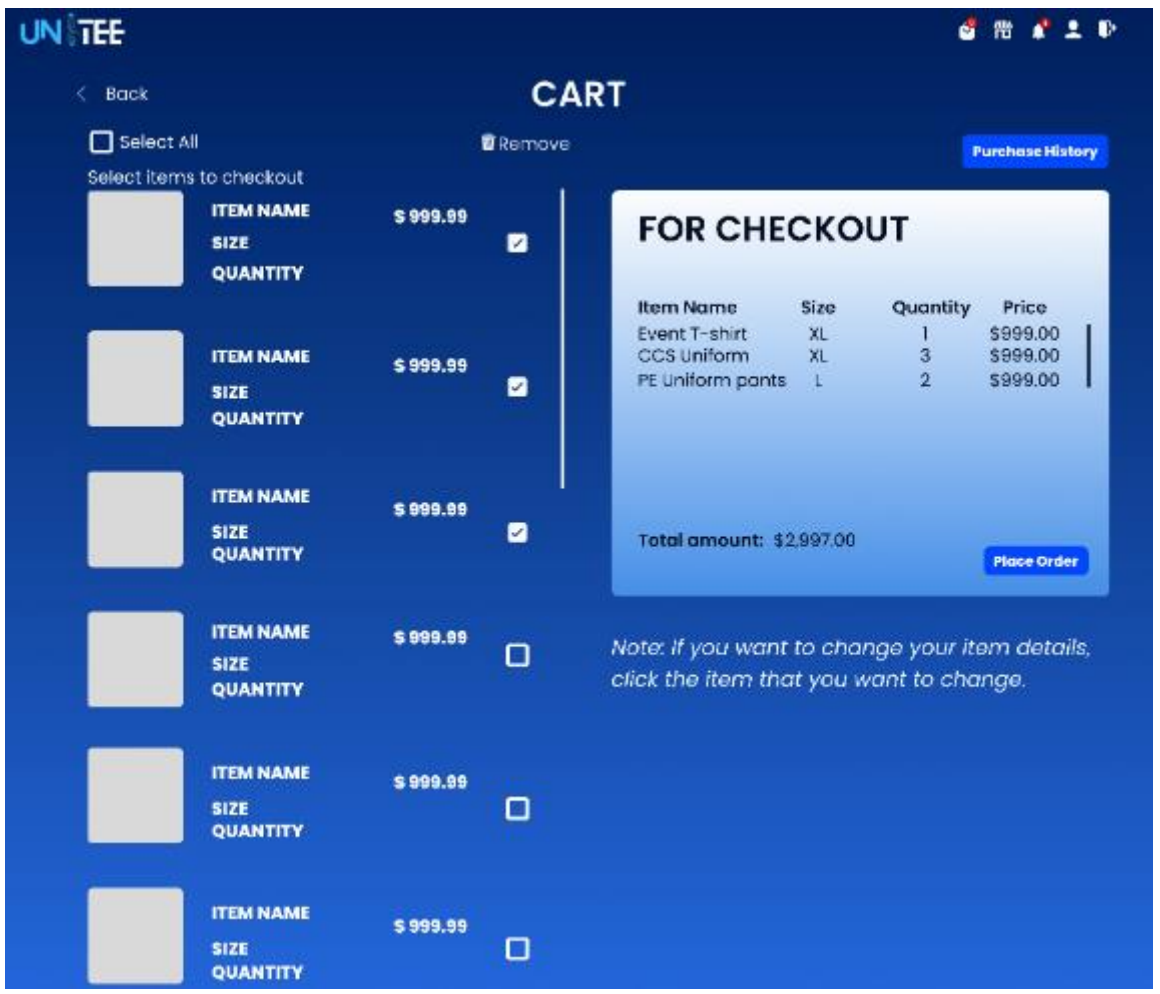


Figure 38. **View Cart**

Items	Type	Required	Data Type	Size
-------	------	----------	-----------	------

Item name	Label	Yes	Varchar	50
Size	Label	Yes	Varchar	50
Quantity	Label	Yes	Int	
Price	Label	Yes	Float	11
Select All	Checkbox	Yes		
Item Checkbox	Button	Yes		
Remove	Button	Yes		
Purchase History	Button	Yes		
Total Amount	Label	Yes	Float	11
Place Order	Button	Yes		
Back	Button	Yes		

LOGIC:

1. The user must first select the products that they wish to remove by clicking the checkboxes that can be seen on the right side of the product details.
- 1.1 After selecting the products, the user must click the remove button.
3. Customers can view their orders by clicking the “purchase history” button in the top right corner.

Module Name: Cart

Screen No: 5.3

Screen Name: Remove Product

Description:

Customers can remove products from the cart they do not wish to check out.

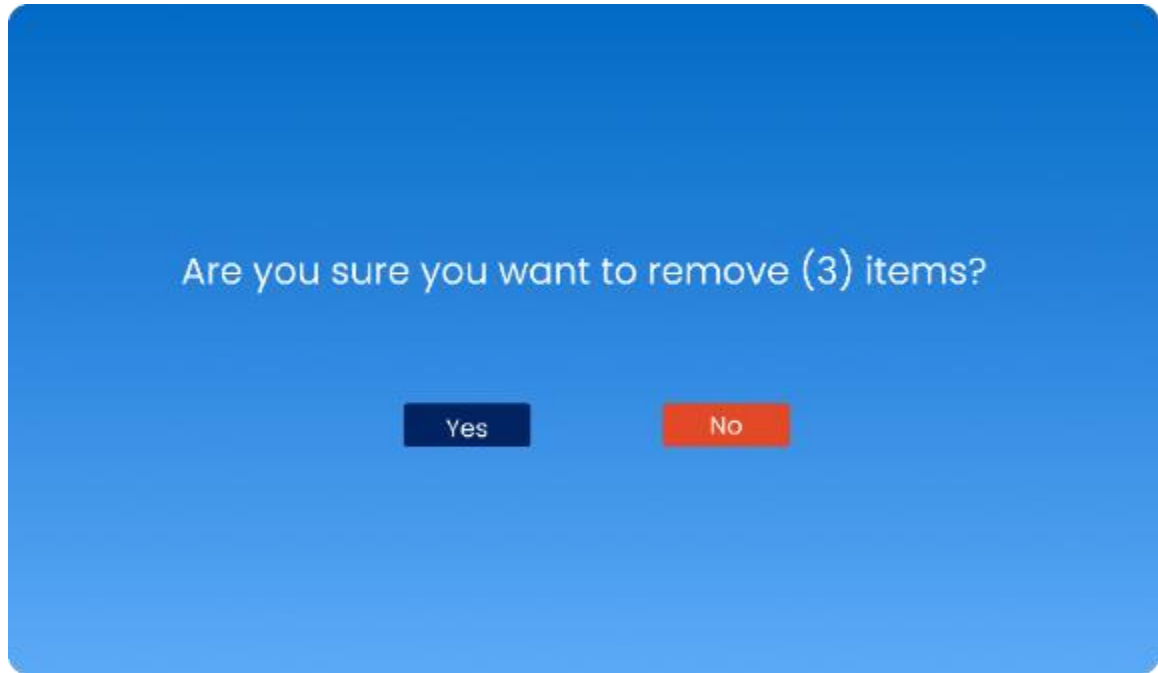


Figure 39. **Remove Product**

Items	Type	Required	Data Type	Size
Yes	Button	Yes		
No	Button	Yes		

LOGIC:

1. If the customer desire to remove a product from the cart, the customer can click the remove button and a promptly

Module Name: Cart

Screen No: 5.4

Screen Name: Edit Product

Description:

Customers can select a product that they want to edit. They can change the size and quantity and save the product details to Cart afterward.

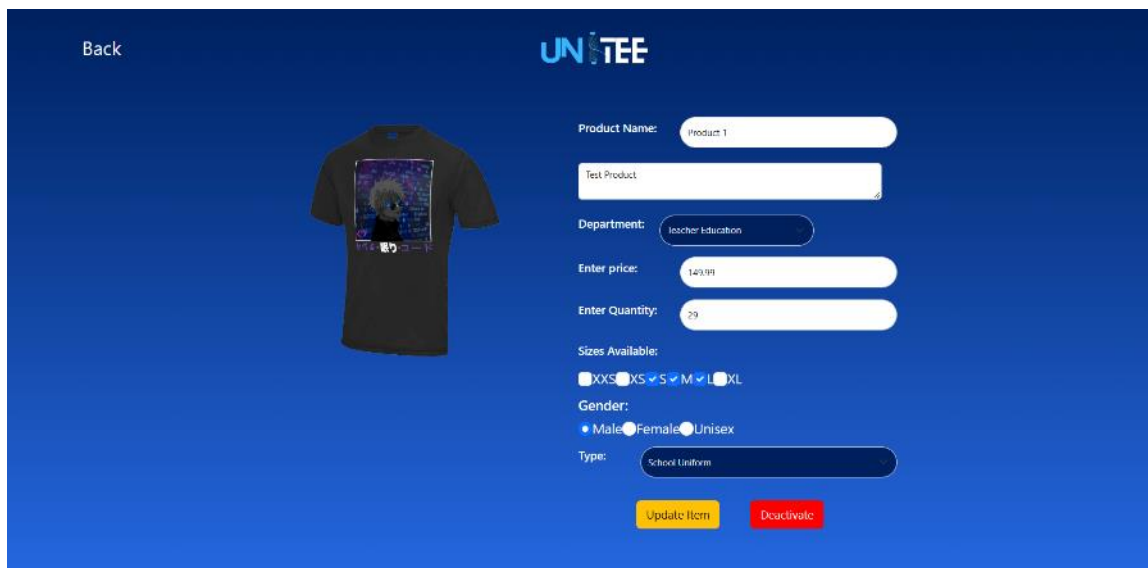


Figure 40. **Edit Product**

Items	Type	Required	Data Type	Size
Item Name	Label	Yes	Varchar	50
Product Type	Label	Yes	Varchar	50
Available Stocks	Label	Yes	Int	11
Size	Radio Button	Yes		
Quantity	Number Picker	Yes	INT	8
Save To Cart	Button	Yes		

LOGIC:

1. A user can only edit one product at a time; by clicking the product details, a window will appear containing the details.
2. To save the changes, the user must click the “Save to Cart” button.

Module Name: Cart

Screen No: 5.5

Screen Name: Place Order

Description:

Displays all products selected from the cart.

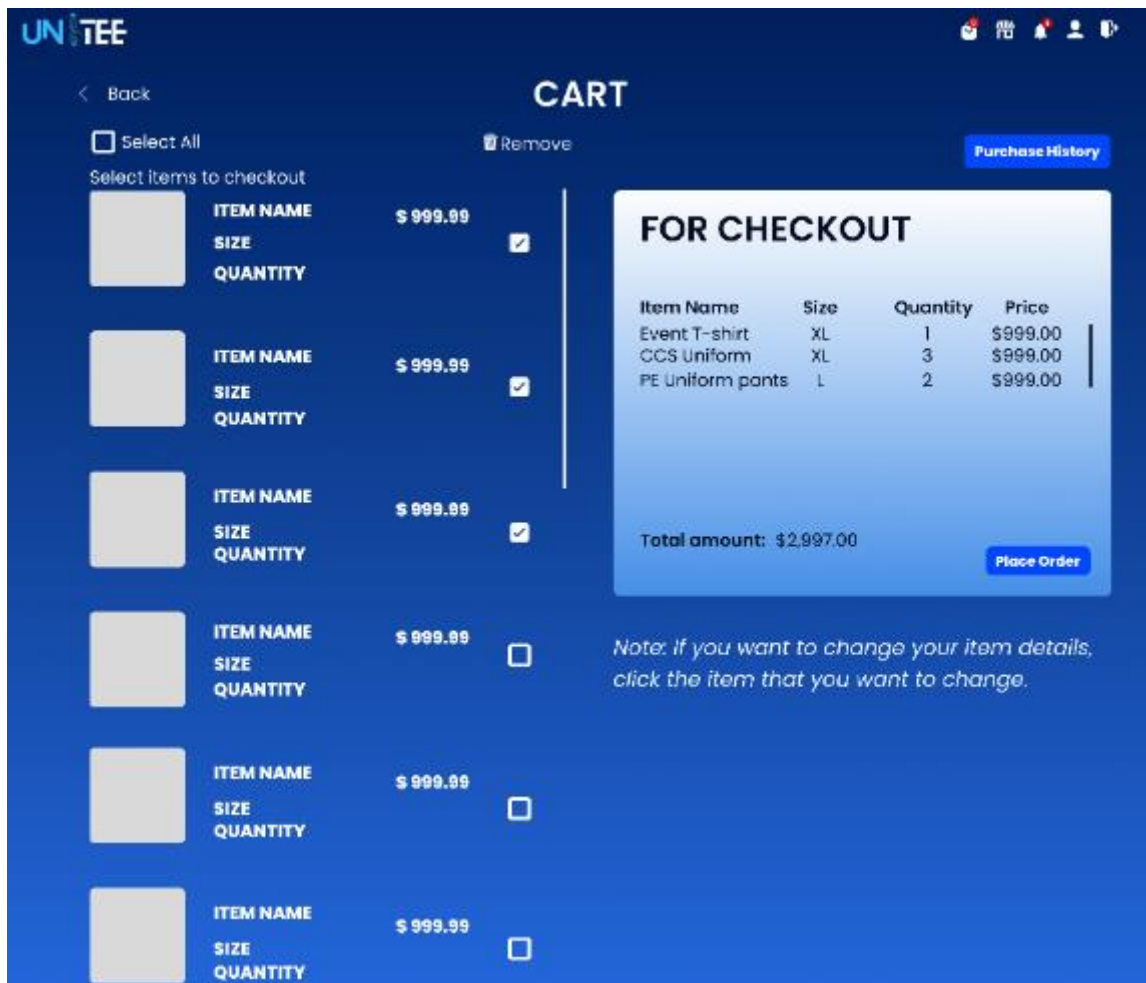


Figure 41. Place Order

Items	Type	Required	Data Type	Size
Item name	Label	Yes	Varchar	50
Size	Label	Yes	Varchar	50

Quantity	Label	Yes	Int	
Price	Label	Yes	Float	11
Select All	Checkbox	Yes		
Item Checkbox	Button	Yes		
Remove	Button	Yes		
Purchase History	Button	Yes		
Total Amount	Label	Yes	Float	11
Place Order	Button	Yes		
Back	Button	Yes		

LOGIC:

1. The selected products from the cart will then be transferred to the checkout page.
2. The customer can use the "Item Checkbox" button to select or deselect them. If unchecked, all checkboxes should be deselected.
 - 2.1 Customer can also use the "Select All" checkbox to simultaneously select all the products listed on the screen.
3. If the user wants to remove any item from the order, they can click the "Remove" button next to the respective product.
4. If the user wants to remove any item from the order, they can click the "Remove" button next to the respective product.
5. The "Purchase History" button lets users view their previous purchase history.

Module Name: Cart

Screen No: 5.6

Screen Name: Purchase History

Description:

This page displays the user's purchase history containing detailed order information. Essential details, including order dates, product names, order numbers, sizes, quantities, and prices, accompany each product in the purchase history. It allows users to recall specific details of each purchase.

Date	Product Name	Order No.	Size	Quantity	Price	Supplier
07/12/23	Programmer Shirt	1287373	M	1	\$134.00	Canteen Co..
07/12/23	Male Polo Shirt	1287373	M	1	\$100.00	Canteen Co..

Figure 42. Purchase History

Items	Type	Required	Data Type	Size
Purchase History	Datagrid	Yes		
Back	Button	Yes		

LOGIC:

1. Customers access the "Purchase History" screen to view their past orders and order details.

Module Name: Cart

Screen No: 5.7

Screen Name: Checkout

Description:

Displays the product list ready for checkout, contains customer information, proof of payment, total amount, and a checkout button.

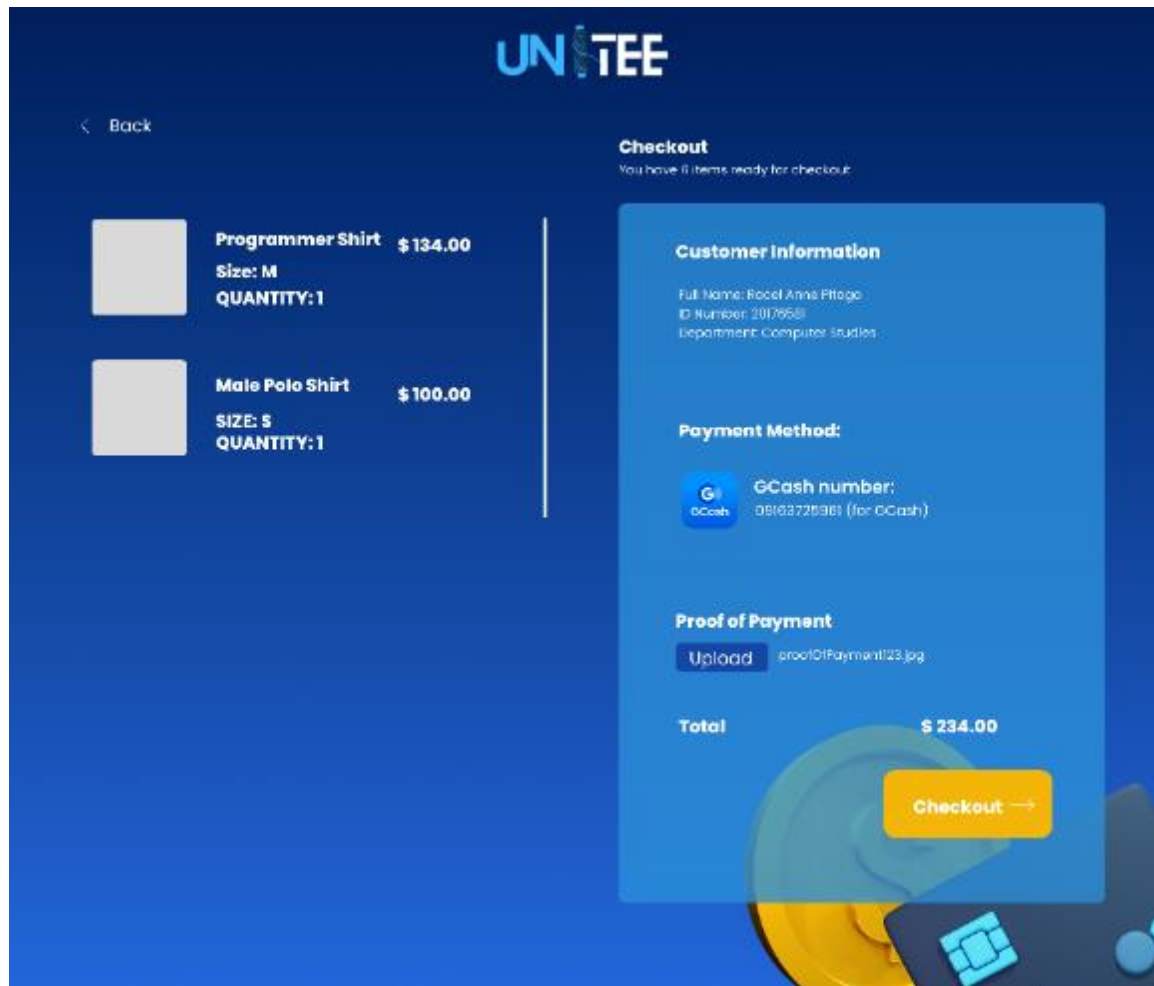


Figure 43. Checkout

Items	Type	Required	Data Type	Size
-------	------	----------	-----------	------

Upload	Button	Yes		
Checkout	Button	Yes		

LOGIC:

1. The customer accesses the "Checkout" screen from the cart or after selecting products for purchase and a list of products ready for checkout, including details such as product names, sizes, quantities, and prices.
2. To validate the transaction, the customer can use the "Upload" button to provide any necessary proof of payment, such as screenshots or scanned receipts.
3. The "Checkout" button lets the customer proceed with the final purchase and payment process.

Module Name: Dashboard

Screen No: 6.1

Screen Name: View Dashboard

Description:

The supplier dashboard enhances the supplier's ability to monitor and manage sales performance efficiently. It provides a detailed overview of the sales performance within the system, including total sales, total claimed orders, total pending orders, top-selling products, and sales statistics.



Figure 44. View Dashboard

Items	Type	Required	Data Type	Size
Total Sales	Label	Yes	Float	11
Total Claimed Orders	Label	Yes	INT	

Sales Statistics	Graph	Yes		
Top Selling Price	List	Yes		

LOGIC:

1. The supplier can view the dashboard to gain insights into the sales performance.
2. The dashboard data is updated regularly in real-time to ensure the admin receives accurate and up-to-date sales information.

Module Name: Items

Screen No: 7.1

Screen Name: View Product

Description:

This allows the supplier to access and review detailed product information on the website. It also provides various tools to filter, search, and view specific product details.

Figure 45. View Product

Items	Type	Required	Data Type	Size
Department	Dropdown	Yes		
Product Type	Dropdown	Yes		
Add Item	Button	Yes		
Search	Textbox	Yes	Varchar	50
Upload Image	Button	Yes		
Product Name	Label	Yes	Varchar	50
Sizes Available	Label	Yes	Varchar	50
Gender	Label	Yes	Varchar	50
Department	Label	Yes	Varchar	50
Product Type	Label	Yes	Varchar	50
Price	Label	Yes	Float	
Stocks Available	Label	Yes	INT	

LOGIC:

1. The "Department" dropdown allows the supplier to filter products based on the selected department, and the "Product Type" dropdown and a "Gender" radio button indicate the target gender for which the product is intended and enable them to organize products further. Additionally, the supplier can upload an image file representing a product for visual identification.

2. Suppliers can search for specific products based on keywords or product names.
3. The "Add Item" button allows the supplier to add new products to the system.

Module Name: Items

Screen No: 7.2

Screen Name: Add Product

Description:

The supplier can add products containing the product type, item name, description, department, price, quantity, sizes available, gender, and category to ensure that customers can access comprehensive and accurate information while purchasing.

Figure 46. Add Product

Items	Type	Required	Data Type	Size
Upload Image	Button	Yes		
Product Type	Dropdown	Yes		
Product Description	Textbox	Yes	Varchar	200
Department	Dropdown	Yes		
Quantity	Button	Yes		

Sizes Available	Checkbox	Yes		
Gender	Radio Button	Yes		
Category	Dropdown	Yes		
Update	Button	Yes		
Cancel	Button	Yes		

LOGIC:

1. The supplier can initiate adding a new product by uploading an image, selecting the product type, providing a detailed description, assigning a department, specifying the quantity, indicating available sizes, choosing the target gender, and assigning a category to organize the product catalog efficiently.
2. After entering all the required product details, the supplier clicks the "Update" button to add the new product to the system and make it available to customers.
3. If the supplier decides not to add the product, they can click the "Cancel" button to discard the changes and return to the previous screen.

Module Name: Items


Screen No: 7.3


Screen Name: Update Product

Description:

Suppliers can modify existing product information within the website to ensure that customers are presented with accurate and up-to-date details about each product.

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Product Type: Uniform

Item Name: ITEM NAME

Item Description:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

MODEL:
 HEIGHT: 6ft
 WEIGHT: 69kg
 SIZE: XLV

Department: Computer Studies

Enter Price: \$99,999.99

Quantity: + 69 -

Sizes Available:

☒ XS
 ☒ M
 ☒ XL
 ☐ 3XL

☒ S
 ☒ L
 ☒ 2XL

Gender:

☒ Male
 ☐ Female
 ☐ Unisex

Category: Event T-shirt

Update

Activate

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Product Type :

Uniform

Item Name

ITEM NAME

Item Description

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
 do eiusmod tempor incididunt ut labore et dolore magna
 aliqua. Ut enim ad minim veniam, quis nostrud exercitation
 ullamco laboris nisi ut aliquip ex ea commodo consequat.
 Duis aute irure dolor in reprehenderit in voluptate velit esse
 cillum dolore eu fugiat nulla pariatur. Excepteur sint
 occaecat cupidatat non proident, sunt in culpa qui officia
 deserunt mollit anim id est laborum.

MODEL:
 HEIGHT: 6'1
 WEIGHT: 68kg
 SIZE: XLV

Department:

Computer Studies

Enter Price

\$99,999.99

Quantity

+

69

-

Sizes Available:

☒ XS
 ☒ M
 ☒ XL
 ☐ 3XL

☒ S
 ☒ L
 ☒ 2XL

Gender:

☒ Male
 ☐ Female
 ☐ Unisex

Category

Event T-shirt

Update

Deactivate

Figure 47. Update Product

Items	Type	Required	Data Type	Size
Upload Image	Button	Yes		

Product Type	Dropdown	Yes		
Product Name	Textbox	Yes	Varchar	50
Product Description	Textbox	Yes	Varchar	200
Department	Dropdown	Yes		
Quantity	Number picker	Yes	Int	11
Sizes Available	Checkbox	Yes		
Gender	Radio Button	Yes		
Category	Dropdown	Yes		
Update	Button	Yes		
Activate	Button	Yes		
Deactivate	Button	Yes		

LOGIC:

1. After initiating the process of updating an existing product containing the crucial details.
2. Once the necessary modifications have been made, the supplier can save the changes and update the product information by clicking on the "Update" button.

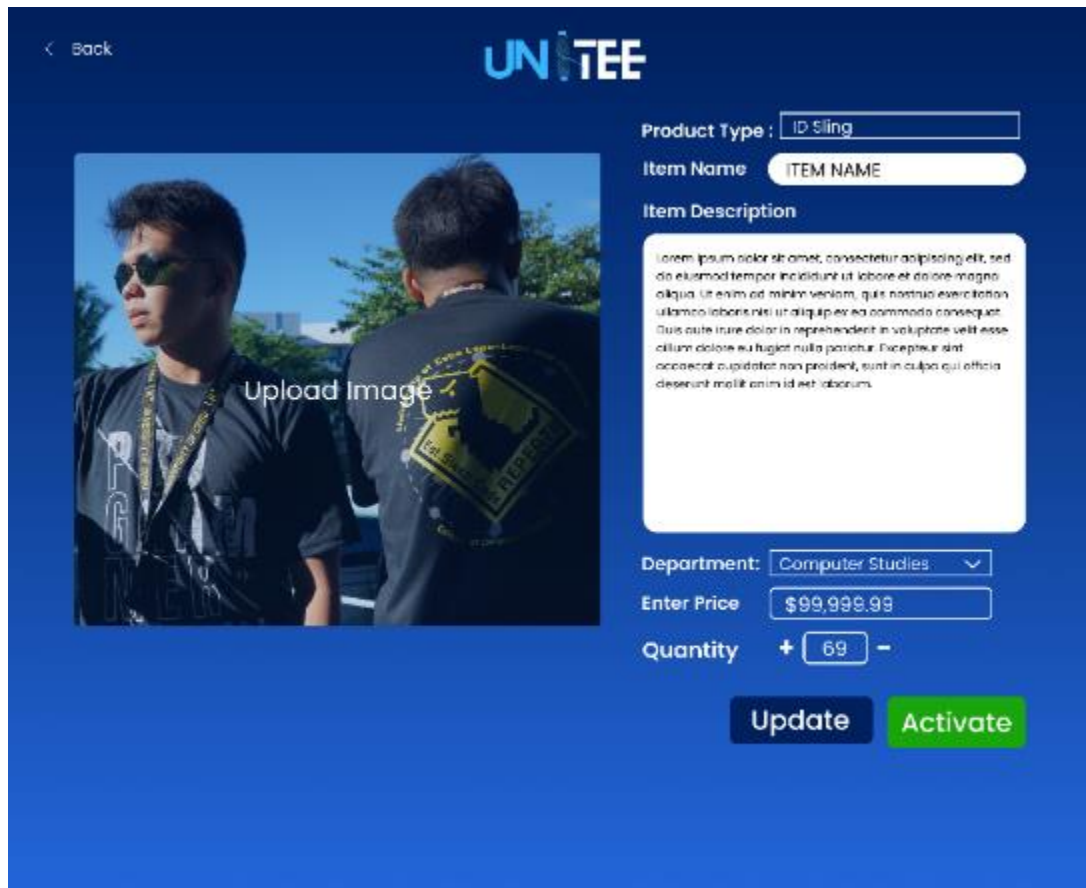
Module Name: Items

Screen No: 7.4

Screen Name: Update Product Status

Description:

This allows the supplier temporarily to remove a product from the website and makes it unavailable for purchase by users.



< Back

UNITEE

Product Type : ID Sling

Item Name ITEM NAME

Item Description

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
do eiusmod tempor incididunt ut labore et dolore magna
aliqua. Ut enim ad minim veniam, quis nostrud exercitation
ullamco laboris nisi ut aliquip ex ea commodo consequat.
Duis aute irure dolor in reprehenderit in voluptate velit esse
cillum dolore eu fugiat nulla pariatur. Excepteur sint
occeccat cupidatat non proident, sunt in culpa qui officia
deserunt mollit anim id est laborum.

Upload Image


Department: Computer Studies


Enter Price \$99,999.99

Quantity + 69 -

Update Activate

[Back](#)





Product Type :

Item Name

Item Description

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
 do eiusmod tempor incididunt ut labore et dolore magna
 aliqua. Ut enim ad minim veniam, quis nostrud exercitation
 ullamco laboris nisi ut aliquip ex ea commodo consequat.
 Duis aute irure dolor in reprehenderit in voluptate velit esse
 cillum dolore eu fugiat nulla pariatur. Excepteur sint
 occaecat cupidatat non proident, sunt in culpa qui officia
 deserunt mollit anim id est laborum.

Department:

Enter Price

Quantity

Figure 48. Update Product Status

Items	Type	Required	Data Type	Size
Upload Image	Button	Yes		
Product Type	Dropdown	Yes		
Product Name	Textbox	Yes	Varchar	50
Product Description	Textbox	Yes	Varchar	200

Department	Dropdown	Yes		
Price	Textbox	Yes	Float	11
Quantity	Number picker	Yes	Int	11
Update	Button	Yes		
Activate	Button	Yes		
Deactivate	Button	Yes		

LOGIC:

1. The supplier can click the "Activate" button to make the product available for purchase,
2. Otherwise, the "Deactivate" button temporarily removes the product.

Module Name: Reports

Screen No: 8.1

Screen Name: View Reports

Description:

Displays a comprehensive stock inventory. This is a valuable resource for the supplier, as it provides an overview of sales performance containing the total item sold by-products and the total amount.

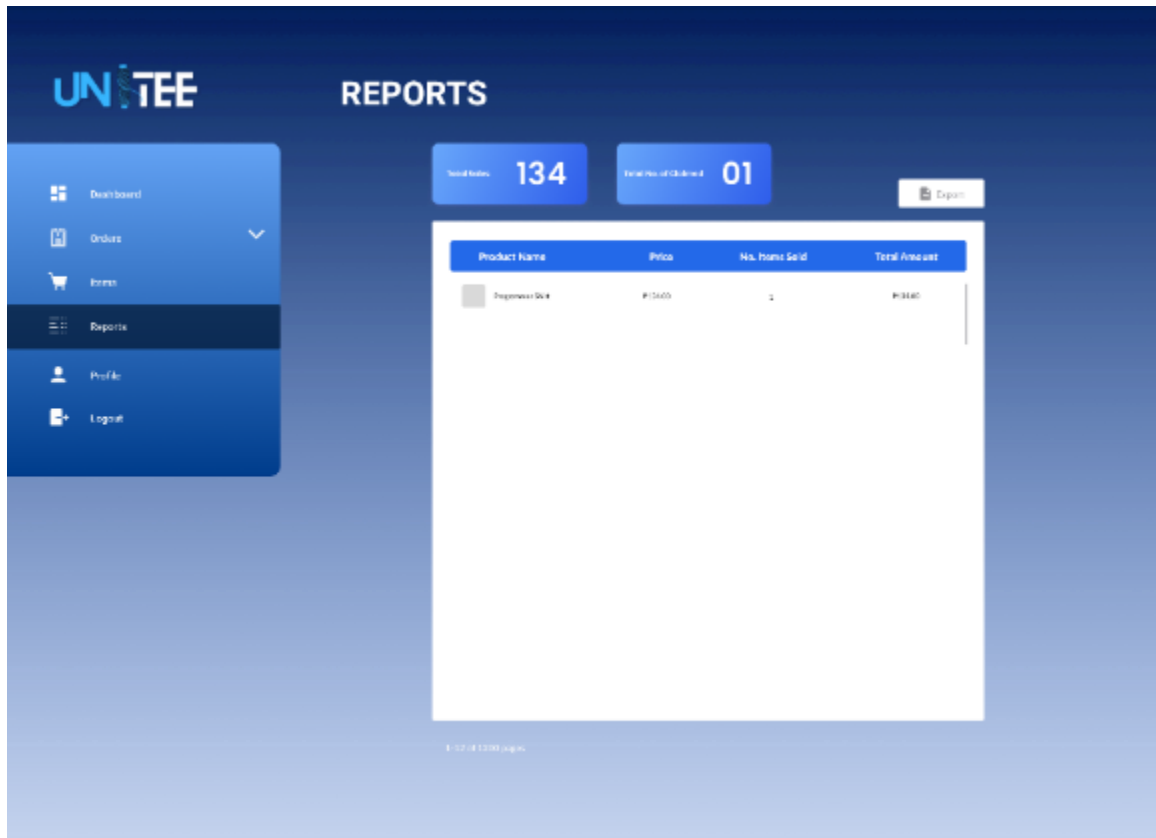


Figure 49. **View Reports**

Items	Type	Required	Data Type	Size
Total Sales	Label	Yes	Float	11

Total number of claimed orders	Label	Yes	Int	11
Product Name	List	Yes	Varchar	50
Price	List	Yes	float	11
Number Item Sold	List	Yes	int	11
Total Amount	List	Yes	float	11
Export	Button	Yes		

LOGIC:

1. This displays a comprehensive stock inventory, providing valuable insights into the supplier's sales performance.

Module Name: Customers

Screen No: 9.1

Screen Name: View Customer Profile

Description:

Displays the list of registered customers. It contains relevant information such as ID number, first name, last name, department, email, phone number, password, image, and account status.

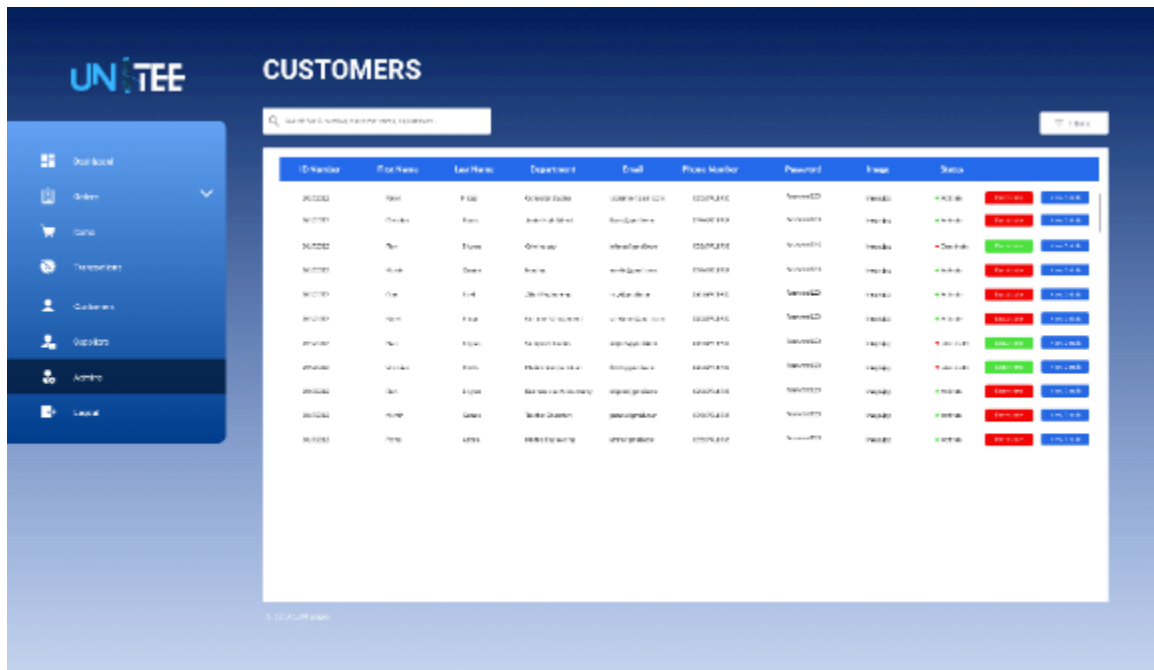


Figure 50. View Customer Profile

Items	Type	Required	Data Type	Size
ID number	List	Yes	Int	11
First Name	List	Yes	Varchar	50
Last Name	List	Yes	Varchar	50
Department	List	Yes	Varchar	50
Email	List	Yes	Varchar	50

Phone Number	List	Yes	Varchar	11
Password	List	Yes	Varchar	16
Status	List	Yes	Varchar	20
Deactivate	Button	Yes		
Activate	Button	Yes		
View	Button	Yes		
Close	Button	Yes	NA	NA

LOGIC:

1. The system populates a tabular view with relevant customer information for each registered customer, including their ID number, first name, last name, department, email, phone number, password, image, and account status.
2. If the customer's account is currently deactivated, the admin can click the "Activate" button to reactivate the customer's account.
3. If the customer's account is active, the admin can click the "Deactivate" button to deactivate the customer's account temporarily.
4. The "View" button lets the admin view more detailed information about a specific customer.

Module Name: Customers

Screen No: 9.2

Screen Name: Update Accounts Status

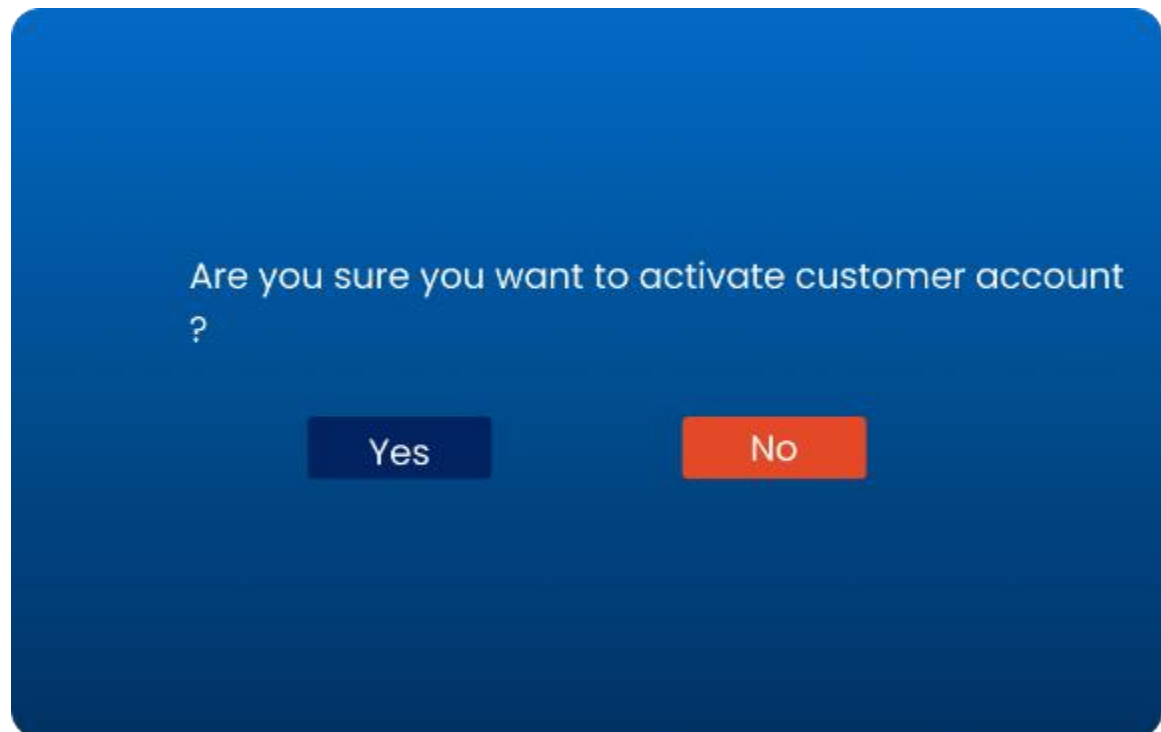
Description:

This allows the admin temporarily to remove a customer from the website and makes it unavailable to log in.



A screenshot of a web application interface for updating a customer's account status. The interface has a dark blue background. On the left, there is a small square profile picture of a woman with blonde hair. To the right of the picture is a light blue rectangular box containing a list of customer details. Each detail is on a new line, with the label on the left and the value on the right. The details are: First Name (Racel), Last Name (Pitogo), Department (Computer Studies), Phone Number (09189435613), Email (racel@gmail.com), ID Number (20150751), and Gender (Female). In the top right corner of the dark blue area, there is a white 'X' icon for closing the form.

First Name	Racel
Last Name	Pitogo
Department	Computer Studies
Phone Number	09189435613
Email	racel@gmail.com
ID Number	20150751
Gender	Female



A confirmation dialog box with a dark blue background. It contains the text "Are you sure you want to activate customer account ?" in white. Below the text are two buttons: a dark blue button labeled "Yes" and an orange button labeled "No".

Are you sure you want to activate customer account ?

Yes No

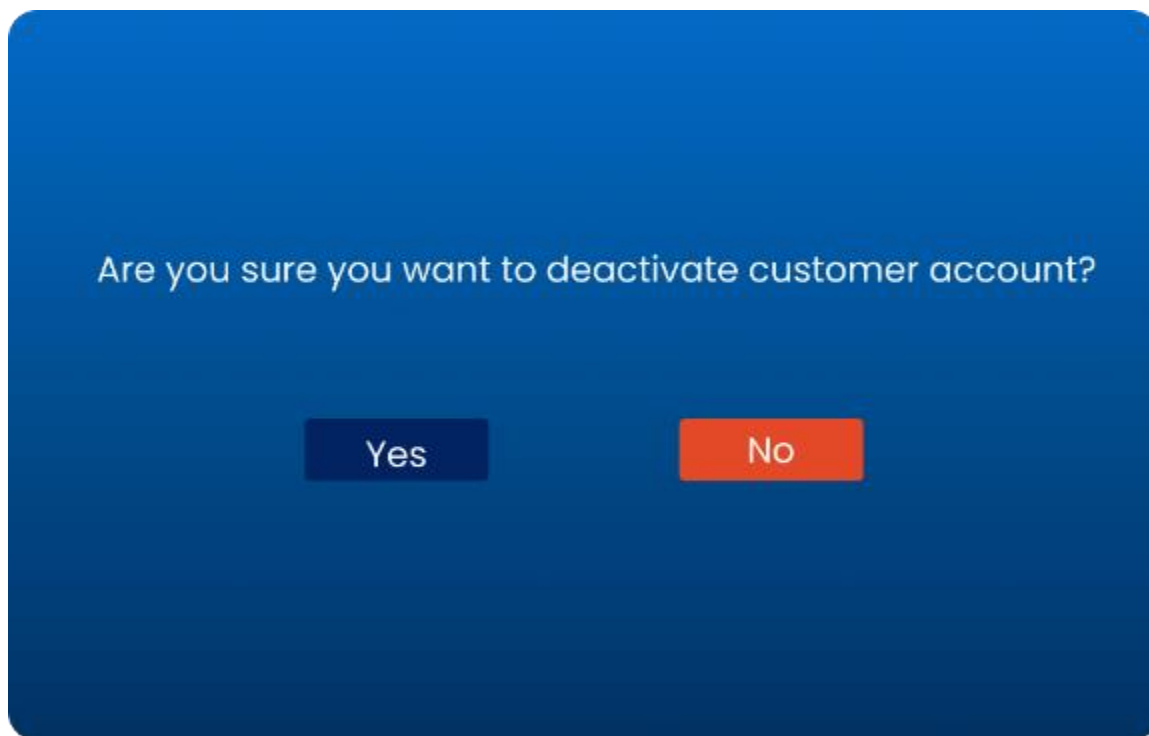


Figure 51. Update Account Status

Items	Type	Required	Data Type	Size
ID number	Label	Yes	Int	11
First Name	Label	Yes	Varchar	50
Last Name	Label	Yes	Varchar	50
Department	Label	Yes	Varchar	50
Email	Label	Yes	Varchar	50
Phone Number	Label	Yes	Varchar	11
Password	Label	Yes	Varchar	16
Image	Label	Yes	Nvarchar	max

Status	Label	Yes	Varchar	20
Yes	Button	Yes		
No	Button	Yes		

LOGIC:

1. The admin can review the customer information displayed on the screen to identify the customer whose account status they want to modify.

Module Name: Suppliers

Screen No: 10.1

Screen Name: View Supplier Profile

Description:

Displays the list of registered suppliers. It contains relevant information such as ID number, first name, last name, email, phone number, shop name, password, image, and Account status.

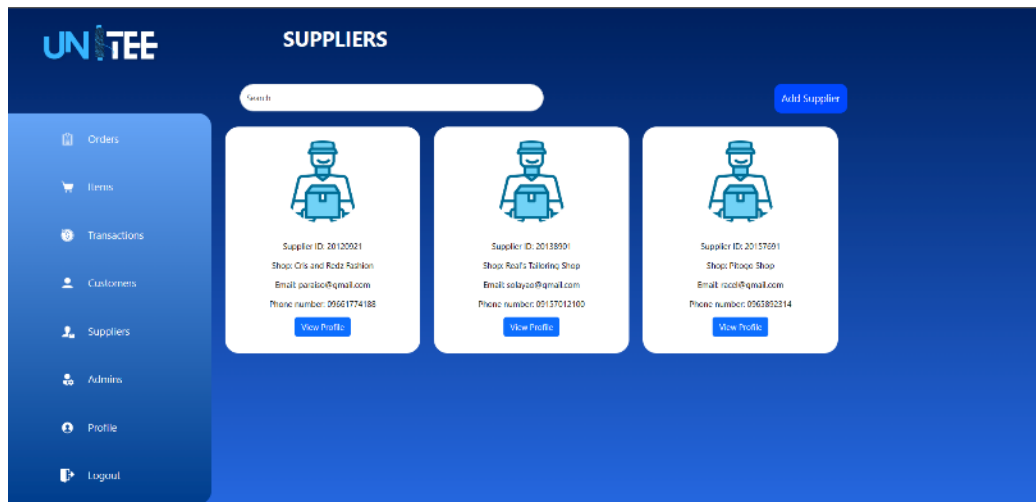


Figure 52. **Supplier Profile**

Items	Type	Required	Data Type	Size
ID number	List	Yes	Int	11
First Name	List	Yes	Varchar	50
Last Name	List	Yes	Varchar	50
Shop Name	List	Yes	Varchar	50
Email	List	Yes	Varchar	50

Phone Number	List	Yes	Varchar	11
Password	List	Yes	Varchar	16
Image	List	Yes	Nvarchar	max
Status	List	Yes	Varchar	20
Deactivate	Button	Yes		
Activate	Button	Yes		
View	Button	Yes		
Close	Button	Yes	NA	NA

LOGIC:

1. The system populates a tabular view with relevant supplier information for each registered customer, including their ID number, first name, last name, department, email, phone number, password, image, and account status.
2. If the supplier's account is deactivated, the admin can click the "Activate" button to reactivate the customer's account.
3. If the supplier's account is active, the admin can click the "Deactivate" button to deactivate the customer's account temporarily.
4. The "View" button lets the admin view more detailed information about a specific supplier.

Module Name: Suppliers

Screen No: 10.2

Screen Name: Add Supplier

Description:

The admin can add the supplier containing the ID number, first name, last name, email, phone number, shop name, password, and supplier image.

Figure 53. **Add Supplier**

Items	Type	Required	Data Type	Size
ID number	Textbox	Yes	Int	11
First Name	Textbox	Yes	Varchar	50
Last Name	Textbox	Yes	Varchar	50
Shop Name	Textbox	Yes	Varchar	50
Email	Textbox	Yes	Varchar	50
Phone Number	Textbox	Yes	Varchar	11
Password	Textbox	Yes	Varchar	16

Image	Textbox	Yes	Nvarchar	max
Status	Textbox	Yes	Varchar	20
Add	Button	Yes		
Cancel	Button	Yes		

LOGIC:

1. The admin accesses the "Add Supplier" screen from the admin dashboard or relevant navigation to initiate adding a new supplier to the system.
2. After entering all the necessary information, the admin clicks the "Add" button to save the new supplier's details and add them to the system.
3. If the admin decides not to add the supplier, they can click the "Cancel" button to discard the entered information and return to the previous screen or dashboard.

Module Name: Suppliers

Screen No: 10.3

Screen Name: Update Account Status

Description:

This allows the admin temporarily to remove a supplier from the website and makes it unavailable to log in and manage products and to also edit the supplier details.

Figure 54. Update Account Status

Items	Type	Required	Data Type	Size
Add Supplier	Button	Yes		
Search	Textbox	Yes	Varchar	50
ID number	List	Yes	Int	11
First Name	List	Yes	Varchar	50
Last Name	List	Yes	Varchar	50
Shop Name	List	Yes	Varchar	50
Email	List	Yes	Varchar	50

Phone Number	List	Yes	Varchar	11
Password	List	Yes	Varchar	16
Image	List	Yes	Nvarchar	max
Status	List	Yes	Varchar	20
Activate	Button	Yes		
Deactivate	Button	Yes		
View	Button	Yes		

LOGIC:

1. The "Activate" button allows the admin to change the account status of a selected supplier to "Active," making the supplier's account accessible for login.
2. The "Deactivate" button allows the admin to change the account status of a selected supplier to "Inactive," temporarily removing the supplier's access to log in.
3. The "View" button lets the admin view more detailed information about a selected supplier.

Module Name: Admin

Screen No: 11.1

Screen Name: View Admin Profile

Description:

Displays the list of registered admins. It contains relevant information such as ID number, first name, last name, email, phone number, shop name, password, image, and Account status.

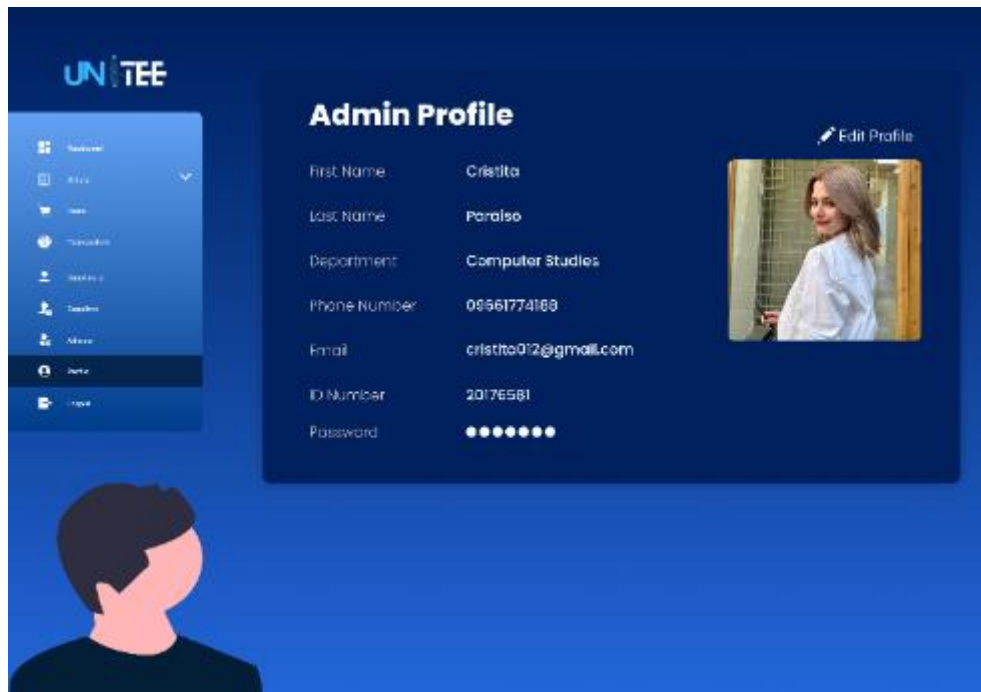


Figure 55. View Admin Profile

Items	Type	Required	Data Type	Size
ID number	Label	Yes	Int	11
First Name	Label	Yes	Varchar	50
Last Name	Label	Yes	Varchar	50
Department	Label	Yes	Varchar	50
Email	Label	Yes	Varchar	50

Phone Number	Label	Yes	Varchar	11
Password	Label	Yes	Varchar	16
Image	Picturebox	Yes	Nvarchar	max
Edit Profile	Button	Yes		

LOGIC:

1. This displays a list of registered admins with their respective details.
2. The "Edit Profile" button allows the admin to update and modify their profile information.

Module Name: Admin

Screen No: 11.2

Screen Name: Update Account Status

Description:

This allows the admin to activate or deactivate an admin from the website, making it unavailable to log in and manage products.

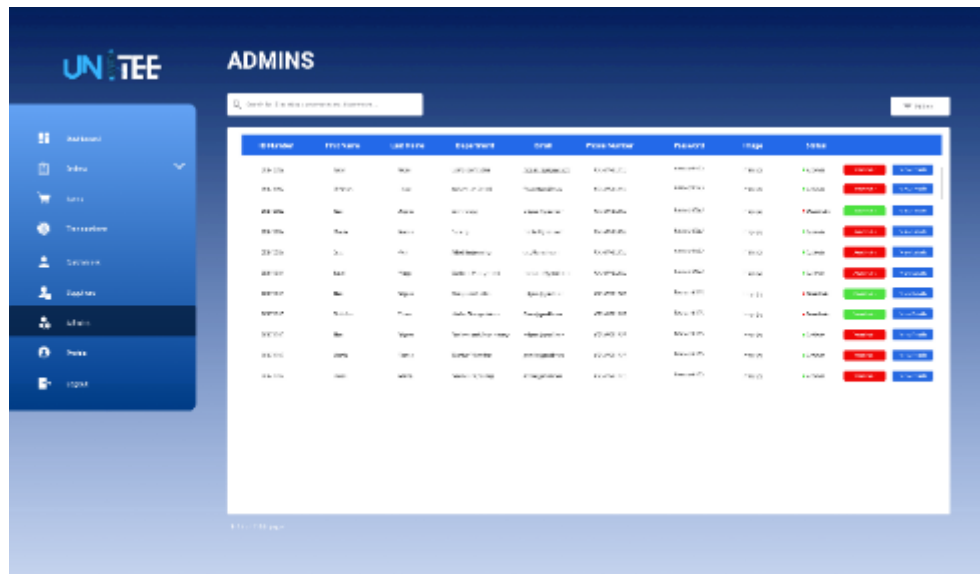


Figure 56. Update Account Status

Items	Type	Required	Data Type	Size
ID number	List	Yes	Int	11
First Name	List	Yes	Varchar	50
Last Name	List	Yes	Varchar	50
Department	List	Yes	Varchar	50
Email	List	Yes	Varchar	50
Phone Number	List	Yes	Varchar	11

Password	List	Yes	Varchar	16
Image	List	Yes	Nvarchar	max
Activate	Button	Yes		
Deactivate	Button	Yes		
View Details	Button	Yes		

LOGIC:

1. The "Activate" button allows the admin to change the account status of a selected admin to "Active," making the supplier's account accessible for login.
2. The "Deactivate" button allows the admin to change the account status of a selected admin to "Inactive," temporarily removing the supplier's access to log in.
3. The "View" button lets the admin view more detailed information about a selected admin.

Amount	List	Yes	Float	11
Quantity	List	Yes	Int	11
Verify	Button	Yes		

LOGIC:

1. This displays a list of pending orders, each with relevant details.
2. The "Verify" button allows the admin to review the details of a specific pending order and proceed with the approval process.

Module Name: Orders

Screen No: 12.1.1

Screen Name: Verify Payment

Description:

Displays detailed information about the pending order where the admin can view proof of payment, approve the order, or deny the order.

Order Details

Customer Info:
 ID number: 20176581
 Fullname: Rodel Anne Pitogo
 Order number: 1287373

Item Name	Size	Quantity	Price
Programmer Shirt	M	1	\$134.00
Male Polo Shirt	M	1	\$100.00

Date: 7/12/2023 **Total : \$ 234.00**

[View Proof of Payment](#)

[Approve](#) [Deny](#)

Figure 58. **Verify Payment**

Items	Type	Required	Data Type	Size
ID number	Label	Yes	Int	11
Full Name	Label	Yes	Varchar	50
Order Number	Label	Yes	Int	11
Item Name	List	Yes	Varchar	50
Size	List	Yes	Varchar	50
Quantity	List	Yes	Int	11

Price	List	Yes	Float	11
Total	Label	Yes	Float	11
Date	Label	Yes	DateTime	
View Proof Of Payment	Button	Yes	Nvarchar	Max
Approve	Button	Yes		
Deny	Button	Yes		

LOGIC:

1. This displays detailed information about the pending order.
2. The "View Proof Of Payment" button allows the admin to access and review the proof of payment provided by the customer, which could be an image or document showing the payment details.
3. The "Approve" button enables the admin to approve the pending order, proceeding with the order fulfillment process.
4. The "Deny" button allows the admin to deny the pending order if any issues are identified or it does not meet the required criteria.

Module Name: Orders

Screen No: 12.2

Screen Name: View Denied Orders

Description:

Displays the list of denied orders.

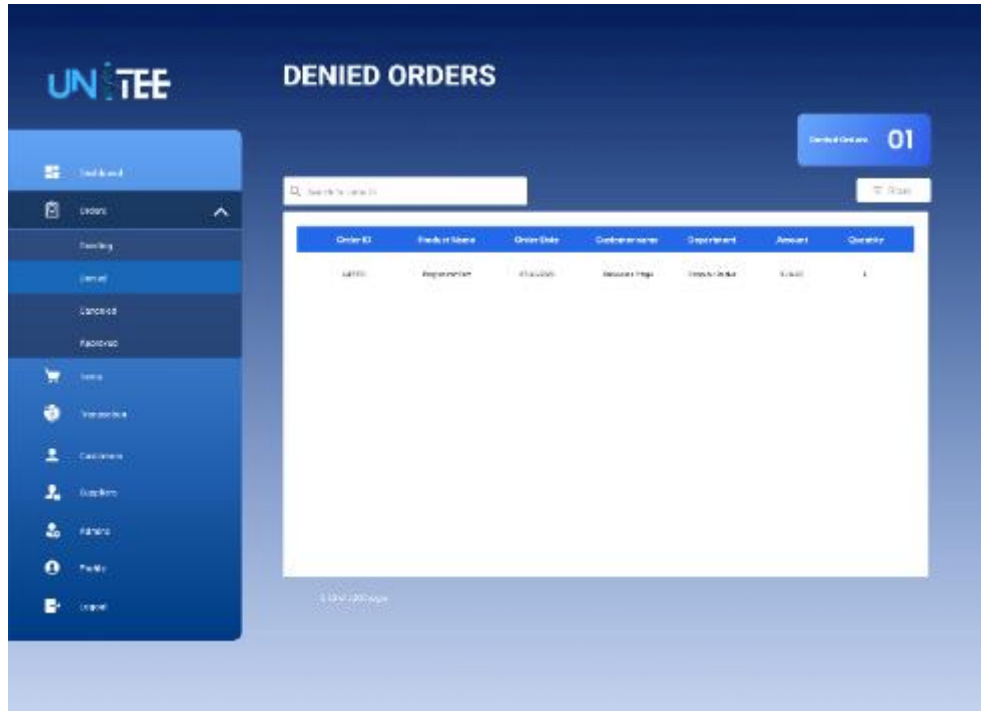


Figure 59. **View Denied Orders**

Items	Type	Required	Data Type	Size
Total Denied Orders	Label	Yes	Int	11
Search	Textbox	Yes	Varchar	50
Order ID	List	Yes	Int	11
Product Name	List	Yes	Varchar	11

Order Date	List	Yes	DateTime	50
Customer Name	List	Yes	Varchar	50
Department	List	Yes	Varchar	50
Amount	List	Yes	Float	11
Quantity	List	Yes	Int	11

LOGIC:

1. The admin to access and review the list of orders that have been previously denied.

Module Name: Orders

Screen No: 12.3

Screen Name: View Canceled

Description:

Displays the list of canceled orders.

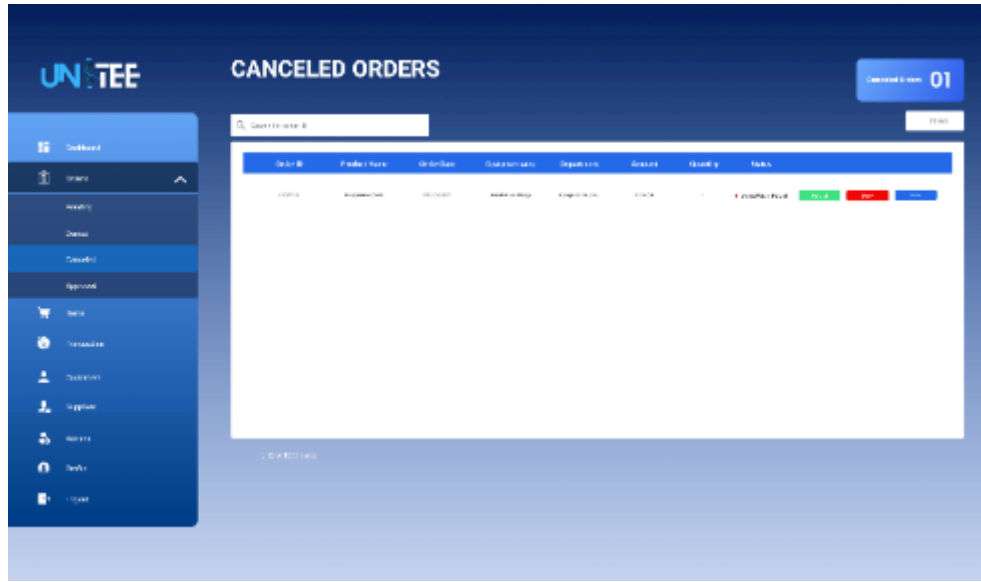


Figure 60. View Canceled Orders

Items	Type	Required	Data Type	Size
Total Canceled Orders	Label	Yes	Int	11
Search	Textbox	Yes	Varchar	50
Order ID	List	Yes	Int	11
Product Name	List	Yes	Varchar	11
Order Date	List	Yes	DateTime	50
Customer Name	List	Yes	Varchar	50

Department	List	Yes	Varchar	50
Amount	List	Yes	Float	11
Quantity	List	Yes	Int	11
Refund	Button	Yes		
Deny	Button	Yes		
View	Button	Yes		

LOGIC:

1. The admin to access and review the list of canceled orders.

Module Name: Orders

Screen No: 12.3.1

Screen Name: Update Order Status

Description:

The admin can modify the canceled order status from “Order Refund” to “Denied Order Refund.”

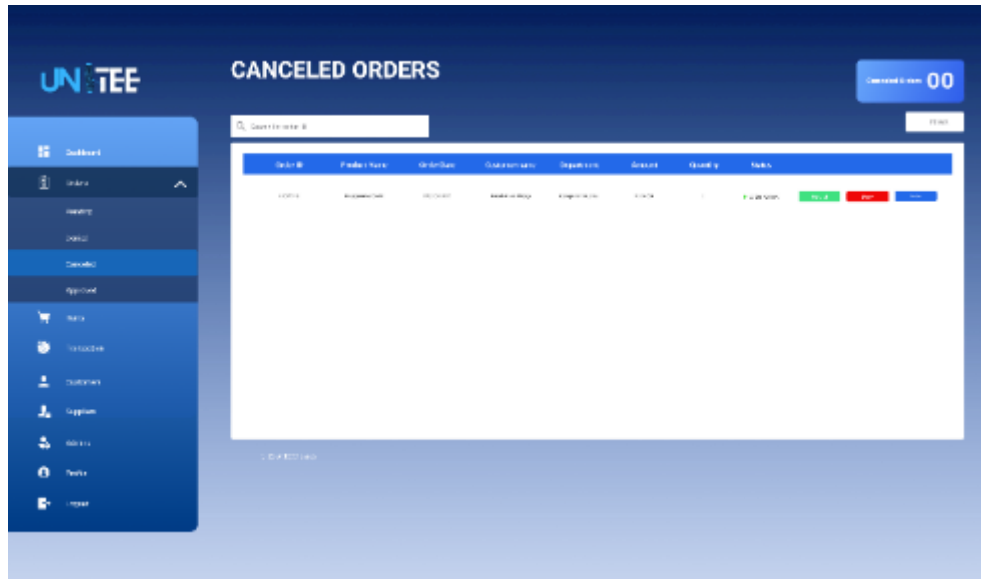


Figure 61. Update Order Status

Items	Type	Required	Data Type	Size
Total Cancelled Orders	Label	Yes	Int	11
Search	Textbox	Yes	Varchar	50
Order ID	List	Yes	Int	11
Product Name	List	Yes	Varchar	11
Order Date	List	Yes	DateTime	50

Customer Name	List	Yes	Varchar	50
Department	List	Yes	Varchar	50
Amount	List	Yes	Float	11
Quantity	List	Yes	Int	11
Refund	Button	Yes		
Deny	Button	Yes		
View	Button	Yes		

LOGIC:

1. The "Refund" button allows the admin to initiate the refund process for the canceled order, ensuring the appropriate action is taken to reimburse the customer.
2. The "Deny" button allows the admin to deny the refund request in case the order is not eligible for a refund or if the admin needs further information before proceeding.
3. Clicking on the "View" button for a specific order from the list allows the admin to access detailed information about the canceled order, including the reason for cancellation if provided by the customer.

Module Name: Orders

Screen No: 12.4

Screen Name: View Approved Orders

Description:

Allows admin and supplier to view the list of approved orders. Moreover, the supplier can change the order status from Approve to Ready to Claim.

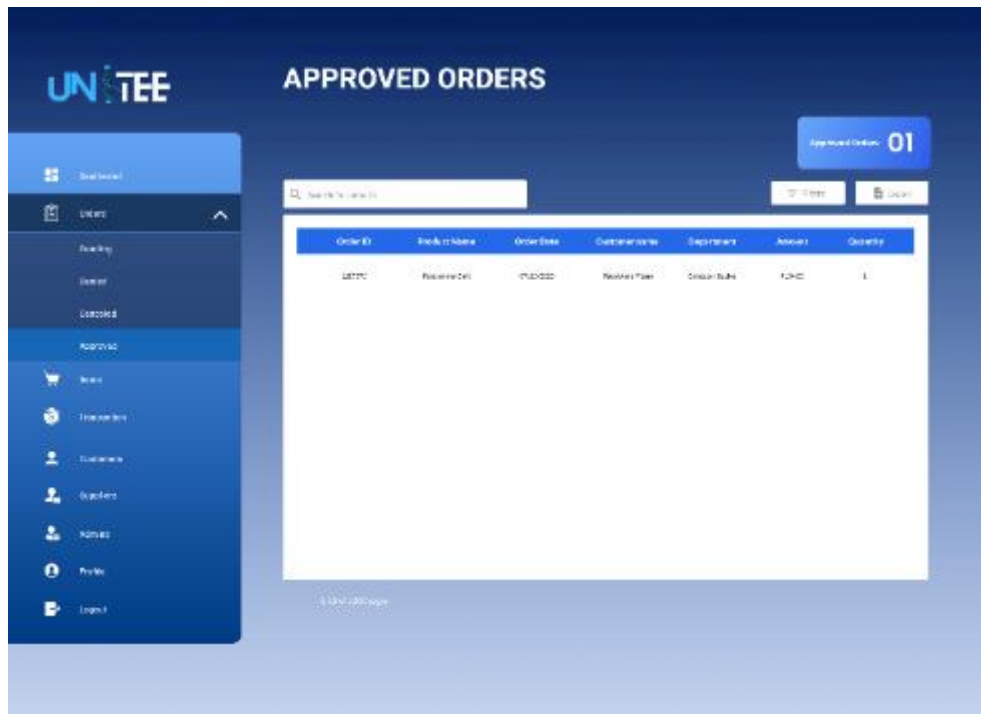


Figure 62. **View Approved Orders**

Items	Type	Required	Data Type	Size
Total Approved Orders	Label	Yes	Int	11
Search	Textbox	Yes	Varchar	50
Order ID	List	Yes	Int	11
Product Name	List	Yes	Varchar	11

Order Date	List	Yes	DateTime	50
Customer Name	List	Yes	Varchar	50
Department	List	Yes	Varchar	50
Amount	List	Yes	Float	11
Quantity	List	Yes	Int	11
Exports	Button	Yes		

LOGIC:

1. The admin to access and review the list of approved orders.

Module Name: Orders

Screen No: 12.5

Screen Name: View Ready to Claim Orders

Description:

Allows suppliers to view the list of Ready to Claim orders. The supplier can verify the order receipt shown by the customer and change the order status to Claimed if the supplier has confirmed the receipt.

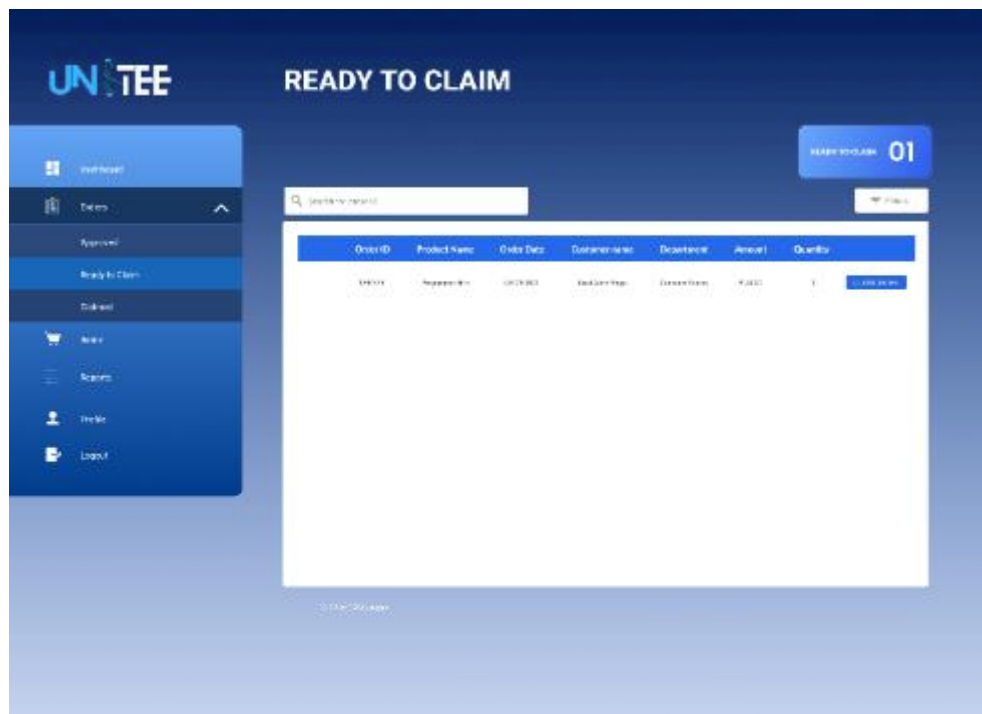


Figure 63. **View Ready to Claim Orders**

Items	Type	Required	Data Type	Size
Total Ready To Claim Orders	Label	Yes	Int	11
Search	Textbox	Yes	Varchar	50
Order ID	List	Yes	Int	11

Product Name	List	Yes	Varchar	11
Order Date	List	Yes	DateTime	50
Customer Name	List	Yes	Varchar	50
Department	List	Yes	Varchar	50
Amount	List	Yes	Float	11
Quantity	List	Yes	Int	11
Claim	Button	Yes		

LOGIC:

1. Displays the list of claimed orders containing the relevant information.
2. It has a filter to help the admin sort out and refine an extensive list of products.
3. When the admin clicks the export button, it enables them to extract relevant information from the website following an Excel file format.

Module Name: Orders

Screen No: 12.6

Screen Name: View Claimed Orders

Description:

Allows suppliers to view the list of claimed orders along with relevant information.

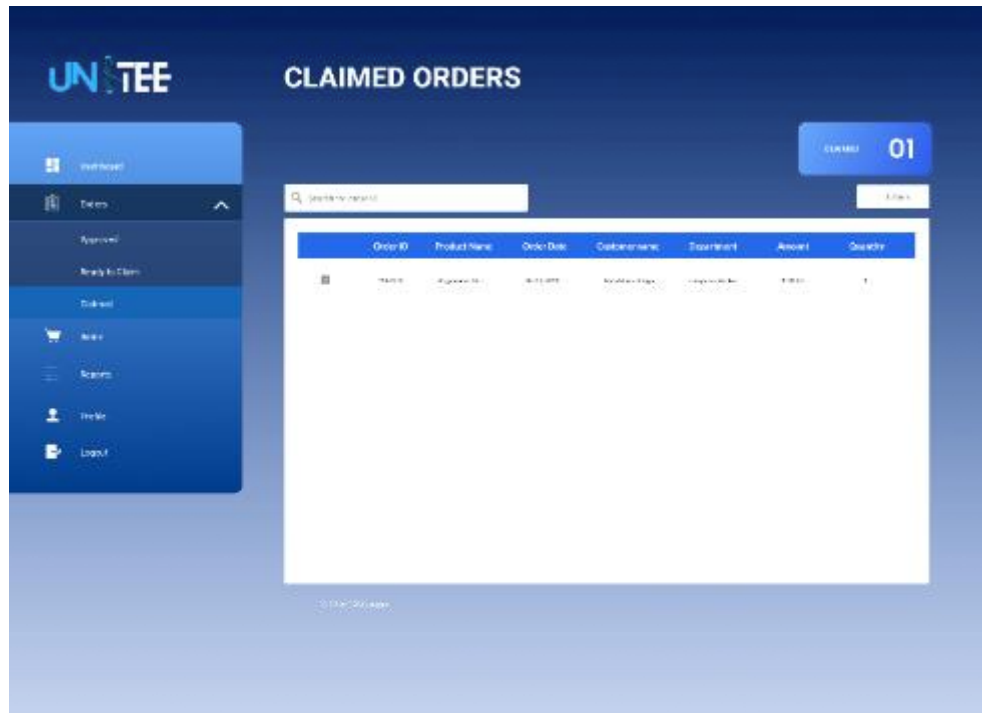


Figure 64. **View Claimed Orders**

Items	Type	Required	Data Type	Size
Total Claimed Orders	Label	Yes	Int	11
Search	Textbox	Yes	Varchar	50
Order ID	List	Yes	Int	11
Product Name	List	Yes	Varchar	11

Order Date	List	Yes	DateTime	50
Customer Name	List	Yes	Varchar	50
Department	List	Yes	Varchar	50
Amount	List	Yes	Float	11
Quantity	List	Yes	Int	11

LOGIC:

1. The admin to access and review the list of claimed orders.

Database Design

This section displays the different tables or entities in the proposed system. The database design shows how the entities are related to each other and the relationship that exists between these entities. It also shows the attribute of every entity and its role and purpose in the system.

Entity Relationship Diagram

The ERD is a diagram that shows the different database tables represented as entities of the proposed system and their relationships with each other. It also contains the cardinality ratios of the entities.

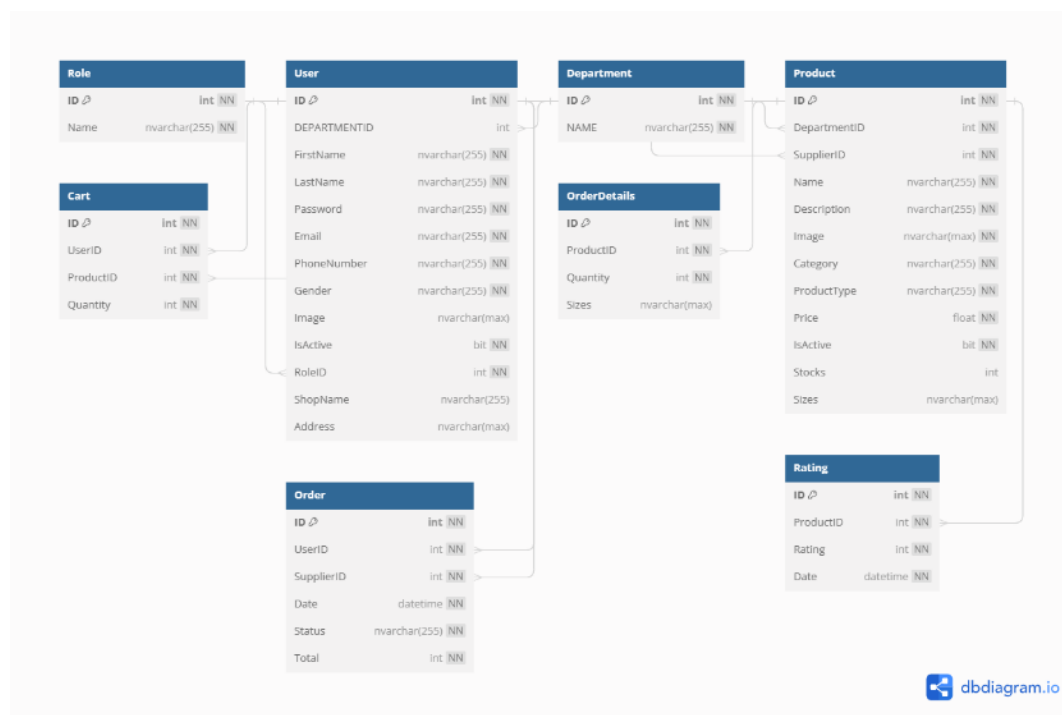


Figure 65. **Entity Relationship Diagram of UNITEE**

This figure illustrates the database schema composed of various interconnected tables. The **Role** table contains unique role IDs and corresponding role names. The **User** table stores user information such as ID, names, password, contact details, and association with a department, along with optional shop name and address. The **Department** table holds department details with their unique IDs and names. The **Product** table encompasses product-related data, including name, description, pricing, category, and images, linked to departments and suppliers. The **Cart** table captures cart entries for users, linking to specific products and tracking quantities. The **Order** table records orders made by users, specifying order details such as date,

status, total amount, and associated suppliers. Order-specific product details and quantities are stored in the **OrderDetails** table. Additionally, the **Rating** table tracks ratings given by users to products, along with associated dates. This schema effectively represents relationships among roles, users, departments, products, carts, orders, and ratings in a comprehensive manner.

Data Dictionary

The data dictionary serves as a single store for details on data, including its origin, intended use, and format. Each table's specifics are succinctly explained and are clear to understand.

Table 5

ROLE

Role				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique ID for the role
Name	NVARCHAR(255)		Not Null	Name of the role

Table 5 shows the Role table shows the various roles within the system, each uniquely identified by an ID and associated with a specific name. This table provides a foundational framework for defining user roles, contributing to access control and privilege management across the system.

Table 6

USER

User				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique ID for the user
DEPARTMENTID	INT	Foreign Key	Not Null	Department associated with the user
FirstName	NVARCHAR(255)		Not Null	First name of the user

LastName	NVARCHAR R(255)		Not Null	Last name of the user
Password	NVARCHAR R(255)		Not Null	Encrypted Password of the user
Email	NVARCHAR R(255)		Not Null	Email address of the user
PhoneNumber	NVARCHAR R(255)		Not Null	Contact number of the user
Gender	NVARCHAR R(255)		Not Null	Gender of the user
Image	NVARCHAR R(MAX)		Null	Image of the user
IsActive	BIT		Not Null	Status of the user
RoleID	INT	Foreign Key	Not Null	Role of the user
ShopName	NVARCHAR R(255)		Null	Shop name of the user
Address	NVARCHAR R(MAX)		Null	Address of the user

Table 6 shows the User table shows individual user profiles, encompassing attributes like first and last names, encrypted passwords, email addresses, contact phone numbers, gender, and profile images. Linked to the Department and Role tables through respective IDs, it visually establishes users' hierarchical positions and functional roles within the organization.

Table 7
DEPARTMENT

Department				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique ID for the department
NAME	NVARCHAR(255)		Not Null	Name of the department

Table 7 shows the Department table displays distinct organizational units or departments, each represented by a unique ID and corresponding name. By visualizing departmental structures, this table aids in efficient categorization of users and products, supporting streamlined organization-wide operations.

Table 8
PRODUCT

Product				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique ID for products
DepartmentID	INT	Foreign Key	Not Null	Department associated with the product
SupplierID	INT	Foreign Key	Not Null	Supplier associated with the product
Name	NVARCHAR(255)		Not Null	Name of the product

Description	NVARCHAR(255)		Not Null	Description of the product
Image	NVARCHAR(MAX)		Not Null	Image of the product
Category	NVARCHAR(255)		Not Null	Category of the product
ProductType	NVARCHAR(255)		Not Null	Type of the product
Price	FLOAT		Not Null	Price of the product
IsActive	BIT		Not Null	Status of the product
Stocks	INT		Null	Quantity of the product in inventory stocks
Sizes	NVARCHAR(MAX)		Null	Sizes of the product

Table 8 shows the Product table exhibits comprehensive product-related data, including identification, names, descriptions, images, categories, types, pricing, and stock availability. Connected to the Department and User tables, it visually illustrates product categorization, management, and presentation tailored to departments and user preferences.

Table 9

CART

Cart				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique ID for cart entries
UserID	INT	Foreign Key	Not Null	Unique ID number for the user
ProductID	INT	Foreign Key	Not Null	Product associated with the cart
Quantity	INT		Not Null	Quantity of the product in the cart

Table 9 now shows the Cart table visually showcases users' shopping carts, indicating selected products and quantities. Linked to users and products, it ensures personalized shopping experiences, reflecting users' preferences as the table represents their evolving selections.

Table 10
ORDER

Order				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique identifier for the order
UserID	INT	Foreign Key	Not Null	Customer associated with the order
SupplierID	INT	Foreign Key	Not Null	Supplier associated with the order
Date	DateTime		Not Null	Date when the order was placed
Status	NVARCHAR (255)		Not Null	Status of the order
Total	INT		Not Null	Total amount of the order

Table 10 shows the Order table demonstrates essential details about customer orders, encompassing order date, status, total amount, and associated users. Through connections to the User and Product tables, it provides a comprehensive view of order-related data, supporting efficient order management and fulfillment.

Table 11
ORDERDETAILS

OrderDetails				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique identifier for order details
ProductID	INT	Foreign Key	Not Null	Product associated with the order details
Quantity	INT		Not Null	Quantity of the product in the order
Sizes	NVARCHAR(MAX)		Null	Sizes of the product in the order

Table 11 shows the OrderDetails table breaks down individual orders, displaying specific product details like quantities and sizes. This view aids accurate order processing, inventory management, and timely delivery by visually delineating the components of each order.

Table 12
RATING

Rating				
Field Name	Data Type	Key	Not Null/Null	Description
ID	INT	Primary Key	Not Null	Unique ID for the rating
ProductID	INT	Foreign Key	Not Null	Product associated with the rating
Rating	INT		Not Null	Rating value (e.g., from 1 to 5)
Date	DateTime		Not Null	Date when the rating was given

Table 12 shows the Rating table exhibits user ratings and reviews for products, showcasing attributes such as the rated product, rating value, rating date, and textual comments. It visually represents customer feedback, allowing the system to adapt and enhance products based on users' insights.

Network Design

Planning and creating a communications network is known as network design. Before network deployment, network design begins with determining business and technical needs (Petryschuk, 2021). The network architecture of the complete system is included in the network design, which also demonstrates how the devices are interconnected.

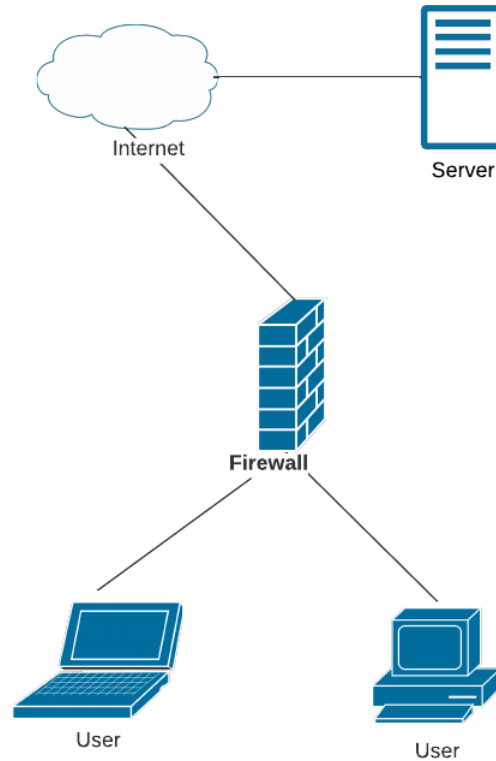


Figure 66. **Network Design of UNITEE**

Network Topology

A computing network's topology describes how its nodes and connections are organized physically and logically (Rouse, 2023). The network topology displays the devices' connections to one another and the route that packets take when being transmitted back and forth.

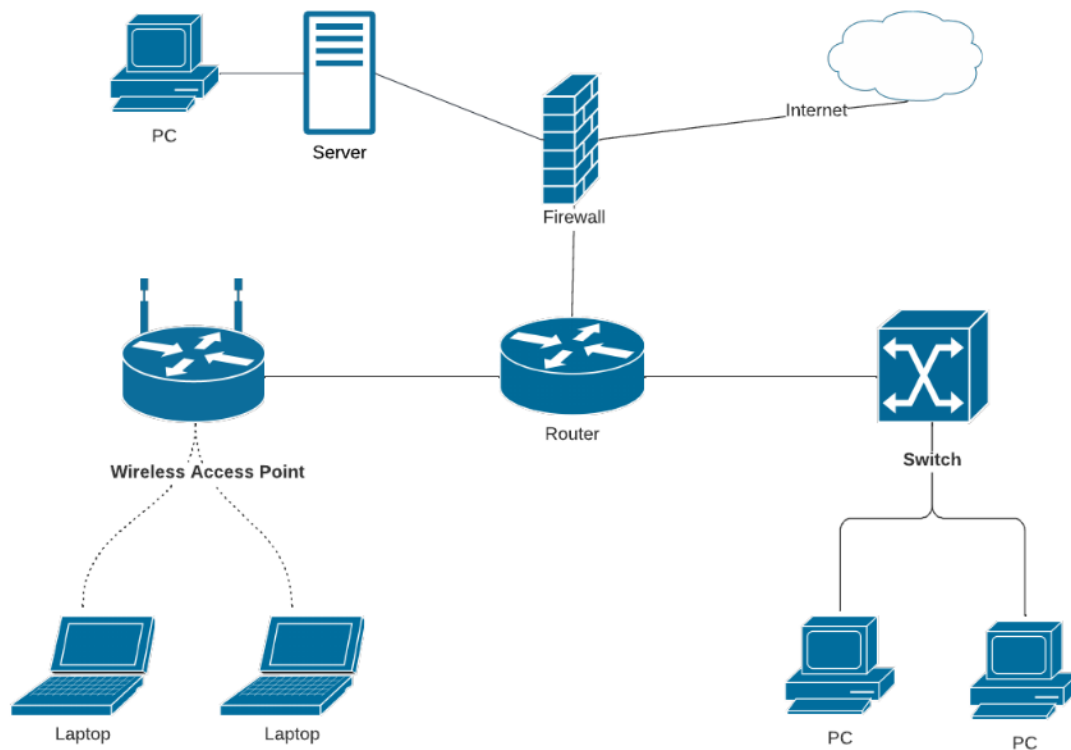


Figure 67. **Network Topology of UNITEE**

Figure 66 depicts the devices' connections and means of communication. Data from UNITEE is kept on a server in the cloud, and in order for devices to access that data or add it to the server, they must connect to the internet.

Development/Construction/Build Phase

This stage marks the beginning of the planned project's execution. It includes all of the system's required technologies and functionality, is divided into modules, and will act as a manual for the implementation procedure. Additionally, it includes the project's software and hardware specifications. The output from this stage will serve as input for the execution phase.

Technology Stack Diagram

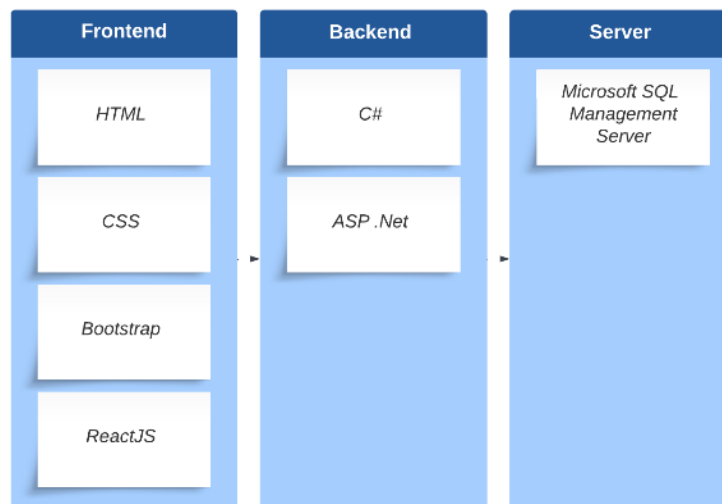


Figure 68. Technology Stack Diagram of UNITEE

The technological stack diagram depicts the technologies required to finish the thoroughly planned system. It divides the necessary technologies based on how they will be applied, such as in creating a mobile application, on the server side of the application, or in future development.

In developing the system of UNITEE, the researchers used the help of Visual Studio. Users may finish the whole development cycle in one location. Before deploying the project, users may write, edit, debug, and build code in this thoroughly integrated development environment (IDE) (Microsoft, 2023). The proponents also used C# and ReactJS for the back-end programming of the system. C# was used because it is incredibly maintainable and scalable. Because static codes must be written strictly, C# programs are consistently consistent, making them significantly more straightforward to modify and maintain than programs created in other languages (Sight, 2022). ReactJS, on the other hand, was used because reusing components is one of the critical advantages of using React JS. Developers save time since they do not have to build several programs for the same functionalities.

Additionally, modifications to one application area will not impact elsewhere (Modan, 2023). Regarding the framework, the researchers used .Net as Microsoft created the .NET framework for software development to support its ecosystem of numerous products and services. Users may also use it to construct web applications, microservices, and APIs. The conclusion that .NET is one of the best platforms utilized by all IT organizations would thus not be challenging to make (Kumar, 2022).

For the Server side, the proponents used Microsoft SQL Management since it offers a visual interface and a variety of options and tools. Storing necessary data in relational databases and effortlessly managing it can be achieved by choosing the best option. Especially for websites that provide the option for users to register in order to log in, this is essential (Perez, 2021). For future development, the proponents would like to develop a mobile counterpart of the web application to increase its market as well as a cross-platform for iOS, a mobile operating system designed by Apple Inc., so that not only users with Android devices can use our app but also those with Apple devices. The proponents would also like to integrate the different tailoring shops for the users to order and purchase merchandise more efficiently.

Software Development Specification

Table 13

SOFTWARE DEVELOPMENT SPECIFICATION

Versioning Software	GitHub	
Project Management Software	optional	
Back-End		
	Operating System	Windows 10 or 11
	DBMS	Microsoft SQL Server Management Studio v19.0
	Platform Technologies	Visual Studio 2022
	Framework	ASP .Net
	API	ASP
	Programming Language	C#
Front-End		
	Scripting Language	ReactJS
	Design Tools	Photoshop, Bootstrap, CCS, HTML
	UI Environment	Web
	Editors	Visual Studio Code
	Animation	optional

This section lists the software requirements that will be utilized to create the overall system, including the operating system, front-end and back-end programming languages, platforms, and database needs. Visual Studio 2022 and Visual Studio Code will be used to create UNITEE. The researchers will use scripting for the front and back end, using both C# and ReactJS for the back end. .Net for the framework, and UNITEE will use Microsoft SQL Server as the server. Only Windows 10 computers will be able to execute the online application.

Hardware Specification

The proposed project would mainly concentrate on software, and the only hardware components involved will be the desktop or laptop computers used to execute the program.

Table 14
HARDWARE SPECIFICATION

Hardware	Minimum Requirements	Recommended
Central Processing Unit (CPU)	Intel Core I3 7100	Intel Core i3 1215U
System Memory (RAM)	8GB DDR4	8GB DDR4
Internal Storage	256GB NVME SSD	512GB NVME SSD
Graphics	INTEL UHD GRAPHICS	INTEL UHD GRAPHICS
Display	15.6" FHD IPS	14 inches
Battery	Integrated 35Wh	51 Wh
Operating System	WINDOWS 10	WINDOWS 11 HOME SL 64BIT
Internet Connection	Wireless NIC Ethernet NIC	Wireless NIC Ethernet NIC

Program Specification

The system's functionalities are divided into modules and listed in the program specification. It also displays the module each team member is assigned to work on. What the system is anticipated to achieve is made apparent through the program specification, which serves as an input to the implementation phase of the proposed system.

List of Modules

Table 15
LIST OF MODULES

UNITEE						
LIST OF SCREENS PER MODULE						
	Screen List			User Access Rights		
	Screen #	Screen Name	Description	Customer	Admin	Supplier
1	Default Page					
Joseph Martin Garado	1.1	Log In	Through a Login page, users can access the website using their account	•	•	•
	1.2	Register	Users can independently create an account through a register page and gain access to the system and its services.	•		
Racel Anne Pitogo	1.3	Home Page	Upon entering the UNITEE website, the users will be greeted with a modern and user-	•		

			friendly interface that showcases an extensive collection of school apparel for various departments.			
2	Shop					
Racel Anne Pitogo	2.1	View Products	<p>The shop contains various apparel available to all students, staff, and parents. A sorting filter feature is prominently displayed on the top of the products available. Users can easily customize the browsing experience making it effortless to narrow down your search and locate desired items.</p> <p>Filtering by department, type, and gender</p>	•		
3	Notification					

<p>Rian Dave Brignas, Joseph Martin Garado, Racel Anne Pitogo, Christian Flores</p>	3.1	View Order Status	<p>This page allows users to check their order status and view details for each stage. The users receive real-time updates on the status of their orders; the system diligently keeps them informed about pending orders, approved orders, ongoing orders, arrived orders, and claimed orders.</p>	•		
	3.1.1	Notification Pending	<p>It shows the pending order's essential details: the order number, item list, number of items, total payment, payment option, and date.</p>	•		
	3.1.2	Notification Denied	<p>It shows the denied order's essential details.</p>	•		
	3.1.3	Notification Canceled	<p>It shows the canceled order's essential details and the supplier details to contact</p>	•		

			the supplier for a refund.			
3.1.4	Notification Approved	Once the administrator approves the order, the user can expect to receive a notification containing the receipt.	•			
3.1.5	Order Receipt	It shows the order's essential details, especially the order number used for an order claiming verification.	•			
3.1.6	Notification Ready to Claim	It shows the ready-to-claim order's essential details along with the order receipt.	•			
3.1.7	Notification Claimed	The display will present crucial information regarding the order, including the order number, itemized list, quantity of items, total payment, and date. Furthermore, it will show the recipient's	•			

			name and the item on which the user may submit feedback.			
4	Profile					
Christian Flores, Racel Anne Pitogo	4.1	View Profile	The user's profile is displayed, which includes essential details about the user.	•	•	•
	4.2	Edit Profile	The user can edit their profile details.	•	•	•
5	Cart					
Rian Dave Brignas, Joseph Martin Garado	5.1	Add Product	To include items in their purchase, customers have the option to select products from the store page, where they can adjust the order specifics and add it to the cart to incorporate the product.	•		
	5.2	View Cart	Displays the products added to the cart by the customer. The customer can either select all items or select a few items that they prefer to	•		

		<p>place the order.</p> <p>Each selected item will also be displayed on the item list containing the item name, size, quantity, and price. A total amount will be calculated once the user selects the products they wish to place the order.</p>			
5.3	Remove Product	<p>Customers can remove products from the cart they do not wish to check out.</p>	•		
5.4	Edit Product	<p>Customers can choose an item they wish to modify, adjust the dimensions and number, and then store the specifics of the item in their shopping cart.</p>	•		
5.5	Place Order	<p>Displays all products selected from the cart.</p>	•		

	5.6	Purchase History	This page displays the user's purchase history containing detailed order information. Essential details, including order dates, product names, order numbers, sizes, quantities, and prices, accompany each product in the purchase history. It allows users to recall specific details of each purchase.	•		
	5.7	Check Out	Displays the product list ready for checkout, contains customer information, proof of payment, total amount, and a checkout button.	•		
6	Dashboard					
Racel Anne Pitogo	6.1	View Dashboard	The supplier dashboard enhances the supplier's ability to monitor and manage sales			•

			performance efficiently. It provides a detailed overview of the sales performance within the system, including total sales, total claimed orders, total pending orders, top-selling products, and sales statistics.			
7	Items					
Rian Dave Brignas, Joseph Martin Garado	7.1	View Product	This allows the supplier to access and review the detailed product information on the website. It also provides various tools to filter, search, and view specific product details.			•
	7.2	Add Product	The supplier can add products containing the product type, item name, description, department, price, quantity, sizes available, gender,			•

			and category to ensure that customers can access comprehensive and accurate information while purchasing.			
	7.3	Update Product	Suppliers can modify existing product information within the website to ensure that customers are presented with accurate and up-to-date details about each product.			•
	7.4	Update Product Status	This allows the supplier temporarily to remove a product from the website and makes it unavailable for purchase by users.			•
8	Reports					
Christan Flores, Racel Anne Pitogo	8.1	View Reports	Displays a comprehensive stock inventory. This is a valuable resource for the		•	

			supplier, as it provides an overview of sales performance containing the total item sold by-products and the total amount.			
9	Customers					
Rian Dave Brignas, Joseph Martin Garado	9.1	View Customer Profile	Displays the list of registered suppliers. It contains relevant information such as ID number, first name, last name, department, email, phone number, password, image, and Account status.		•	
	9.2	Update Account Status	This allows the admin temporarily to remove a customer from the website and makes it unavailable to log in.		•	
10	Suppliers					
Rian Dave Brignas,	10.1	View Supplier Profile	Displays the list of registered suppliers. It contains relevant information such as		•	

Joseph Martin Garado			ID number, first name, last name, email, phone number, shop name, password, image, and Account status.			
	10.2	Add Supplier	The admin can add the supplier containing the ID number, first name, last name, email, phone number, shop name, password, and supplier image.		•	
	10.3	Update Account Status	This allows the admin temporarily to remove a supplier from the website and makes it unavailable to log in and manage products.		•	
11	Admin					
Racel Anne Pitogo, Christian Flores	11.1	View Admin Profile	Displays the admin profile. It contains relevant information such as ID number, first name, last name, email, phone number, shop		•	

			name, password, image, and Account status.			
	11.2	Update Account Status	This allows the admin to temporarily remove an admin from the website, making it unavailable to log in and manage products.		•	
12	Orders					
Rian Dave Brignas, Joseph Martin Garado, Racel Anne Pitogo, Christian Flores	12.1	View Pending Orders	Displays the list of pending orders to be approved by the admin.		•	
	12.1.1	Verify Payment	Displays detailed information about the pending order where the admin can view proof of payment, approve the order, or deny the order.		•	
	12.2	View Denied Orders	Displays the list of denied orders.		•	
	12.3	View Canceled Orders	Displays the list of canceled orders.		•	

	12.3.1	Update Order Status	The admin can modify the canceled order status from "Order Refund" to "Denied Order Refund."		•	
	12.4	View Approved Orders	Allows admin and supplier to view the list of approved orders. Moreover, the supplier can change the order status from Approve to Ready To Claim.		•	•
	12.5	View Ready to Claim Orders	Allows suppliers to view the list of Ready To Claim orders. The supplier can verify the order receipt shown by the customer and change the order status to Claimed if the supplier has confirmed the receipt.			•
	12.6	View Claimed Orders	Allows suppliers to view the list of claimed orders along with relevant information.			•

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- **Civil Status:** Single
- **Religion:** Roman Catholic
- **Citizenship:** Filipino
- **Date of Birth:** January 10, 2001

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- **Sex:** Male
- **Civil Status:** Single
- **Religion:** Roman Catholic
- **Citizenship:** Filipino
- **Date of Birth:** January 12, 2001

APPENDICES
Appendix A
Transmittal Letter

July 24, 2022

Dr. Aurora C. Miro
Dean – CCS
University of Cebu – Lapu Lapu and Mandaue

Dear Dr. Miro,

Good day!

We, the fourth year BSIT (Bachelor of Science in Information Technology) students at the College of Computer Studies at the University of Cebu – Lapu Lapu and Mandaue, would like to propose a system for our capstone project entitled **“UNITEE (University Tees): A web-based storefront for uniforms and other merchandise”**. It is a system that enables users to order, purchase, track, be notified, and be recommended their needed uniforms and available event and organization t-shirts in their respective departments.

In line with this matter, we would like to ask for your consent to conduct a survey beneficial for our study. We believe that this survey would be a great help in developing our system and as a foundation of our study. Rest assured that the information gathered will be used for our study only and be kept confidential.

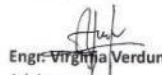
We hope that our request will be given consideration. Thank you and more power.

Sincerely,



CHRISTIAN M. FLORES
Project Manager

Noted by:



Engr. Virginia Verdun
Adviser

Approved by:

Dr. Aurora C. Miro
Dean – CCS

July 24, 2022

Mr. Crisaldo Borgonia
Dean – College of Customs Administration
University of Cebu – Lapu Lapu and Mandaue

Dear Mr. Borgonia,

Good day!

We, the fourth year BSIT (Bachelor of Science in Information Technology) students at the College of Computer Studies at the University of Cebu – Lapu Lapu and Mandaue, would like to propose a system for our capstone project entitled **"UNITEE (University Tees): A web-based storefront for uniforms and other merchandise"**. It is a system that enables users to order, purchase, track, be notified, and be recommended their needed uniforms and available event and organization t-shirts in their respective departments.


In line with this matter, we would like to ask for your consent to conduct a survey beneficial for our study. We believe that this survey would be a great help in developing our system and as a foundation of our study. Rest assured that the information gathered will be used for our study only and be kept confidential.

We hope that our request will be given consideration. Thank you and more power.

Sincerely,


CHRISTIAN M. FLORES
Project Manager

Noted by:


Engr. Virginia Verdun
Adviser

Approved by:

Dr. Aurora C. Miro
Dean – CCS

July 24, 2022

Dear Ma'am/Sir,

Good day!

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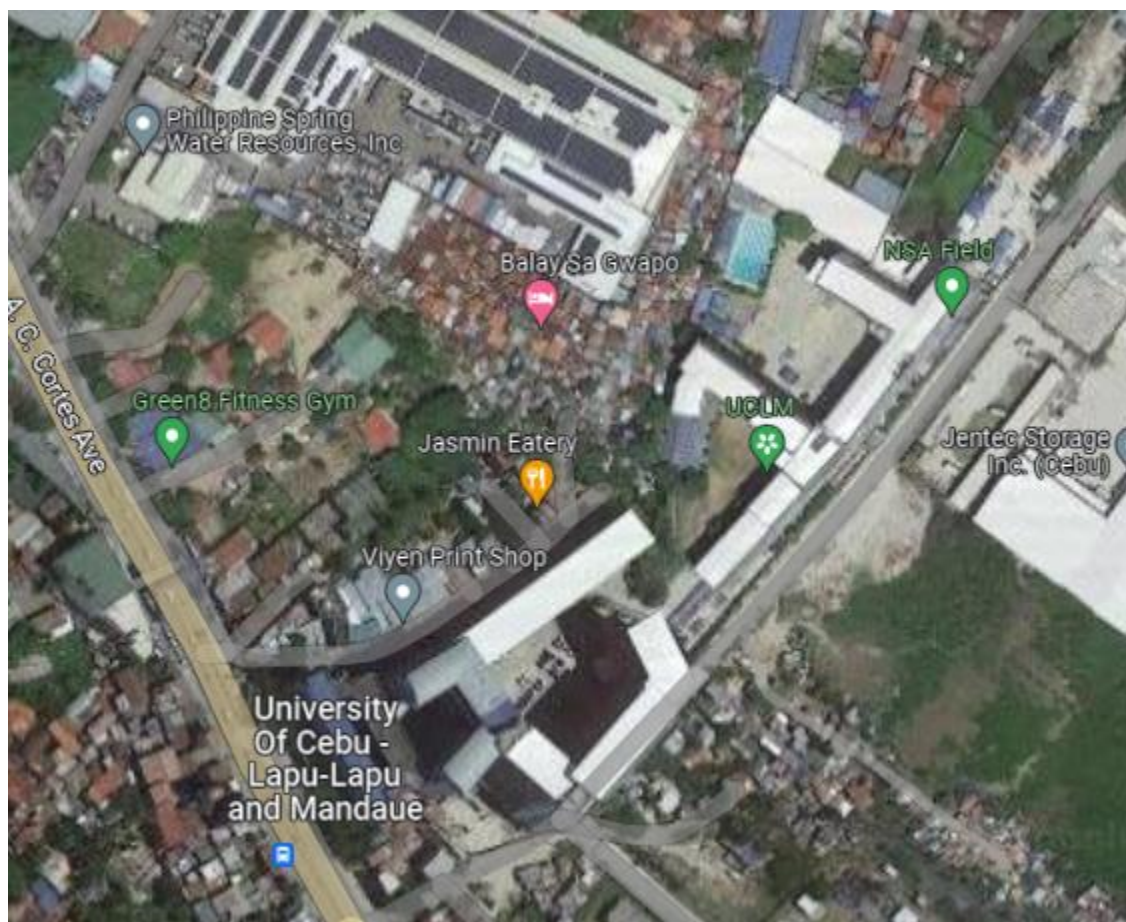
Noted by:


Engr. Virginia Verdun
Adviser

Approved by:

Dr. Aurora C. Miro
Dean - CCS

Appendix B
Map of Research Environment



Appendix C

Survey Questionnaires

I. Survey Questionnaire for Students

Survey Questionnaire

Dear Respondents:

Greetings!

We are students of University of Cebu pursuing a Bachelor of Science in Information Technology degree. We are doing a research titled UNITEE (University Tees): A web-based storefront for selling school uniforms and other items as a partial completion of the prerequisite to the aforementioned degree. In this respect, please set aside a few minutes to complete this questionnaire honestly. Your responses are crucial and useful for the success of the study. Please feel free to contact the researchers if there are any questions or areas in the questionnaire that are unclear to you. You may be sure that all collected data will be handled in the strictest of confidence.

Thank you very much for your cooperation.

The Researchers

The Researchers

cf5960053835@gmail.com [Switch account](#)

Not shared

* Indicates required question

What is your age? *

Your answer

What is your gender? *

☐ Male

☐ Female

☐ Prefer not to say

☐ Other: _____

	<p>What year level or grade are you in? *</p> <p>Your answer _____</p>											
	<p>What department are you in? *</p> <p> <input type="radio"/> Elementary and Junior High School <input type="radio"/> Senior High school <input type="radio"/> Criminology <input type="radio"/> Nursing <input type="radio"/> Allied Engineering <input type="radio"/> Customs Management <input type="radio"/> Computer Studies <input type="radio"/> Business and Accountancy <input type="radio"/> Teacher Education - <input type="radio"/> Marine Engineering <input type="radio"/> Hotel and Tourism Management <input type="radio"/> Marine Transportation </p>											
	<p>What program or strand are you in? (Answer must be not in acronym) *</p> <p>Your answer _____</p> <p>How likely have you had a hard time purchasing your school uniform? *</p> <p>(1 is the lowest and 5 is the highest)</p> <table> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> </tr> </table>	1	2	3	4	5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
1	2	3	4	5								
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>								
	<p>In the moment when you're buying your uniform, does the store have stocks of it? *</p> <p>In the moment when you're buying your uniform, does the store have stocks of it? *</p> <p> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Other: _____ </p> <p>How likely does the store doesn't have stocks when you purchase a uniform? *</p> <p>1 - most likely doesn't have stocks 5 - most likely have stocks</p> <table> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> <td><input type="radio"/></td> </tr> </table> <p>What problem(s) do you usually encounter upon availing or claiming school uniforms? *</p> <p>..</p>	1	2	3	4	5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
1	2	3	4	5								
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>								

	<p>What problem(s) do you usually encounter upon availing or claiming school uniforms? *</p> <p>Your answer</p> <p>If there are no stocks at that moment, does the store guarantee you that your order will be given as soon as they restock? *</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p>Does the store have any way of notifying you once your order is ready? *</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p>If yes, then how? *</p>	
	<p>If yes, then how? *</p> <p>Your answer</p> <p>Do you have any way to track your ordered school uniform as you wait for the store to restock? *</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p>If yes, then how? *</p> <p>Your answer</p> <p>When purchasing and ordering your school uniform, does the store have any size guides to help you choose what size fits you best? *</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	
	<p>guides to help you choose what size fits you best?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p>If yes, then how? *</p> <p>Your answer</p> <p>Would you prefer to buy school uniforms and other school apparel online? *</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p>Would you use a feature that suggests uniforms or merchandise based on your previous purchases? *</p>	

Would you use a feature that suggests uniforms or merchandise based on your previous purchases? *

☐ Yes

☐ No

How likely are you to use a feature that provides order tracking for your purchased uniforms and merchandise? *

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

Are there any specific features you want to see in a web-based storefront system for school uniforms? *

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

Are there any specific features you want to see in a web-based storefront system for school uniforms? *

☐ Yes

☐ No

If yes, please specify. *

Your answer

[Submit](#) [Clear form](#)

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Google Forms

II. Interview Questions for Tailoring Shops

- a. Do you have an application or system for your tailoring shop?
- b. Does an application or system for your tailoring shop help your shop to thrive and help your business run more efficiently?
- c. If you have an application or system for your tailoring shop, what functionalities and features would you like to embed in your system?
- d. How do you manage the orders from your customers?
- e. Do you usually encounter problems when receiving and preparing orders?
- f. Are there any problems you have encountered during the distribution of orders?

Appendix D
Results of the Survey