Addis Ababa Science and Technology University

College of Engineering

Department of Software Engineering

Software Component Design

Title:Figma Description

Group Members:

1. Amanuel Ayana ETS 0110/13
2. Amanuel Dagnachew ETS 0112/13
3. Amanuel Mandefro ETS 0121/13
4. Amanuel Solomon ETS 0126/13
5. Beamanuel Tesfaye ETS 0180/13

Dec, 2024

Submitted to: Mr.

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Introduction

Figma is a powerful, cloud-based design and prototyping tool widely used for creating user interfaces, building design systems, and collaborating on design projects. It enables designers and teams to work together in real time, making it an invaluable asset for projects requiring seamless collaboration and dynamic adjustments.

In the context of our projects, an **E-Commerce Application** (mobile and desktop) and **an Employee Task Manager** (desktop). Figma played a crucial role in bringing our design concepts to life. Its advanced features, such as reusable components, prototyping capabilities, and cross-platform accessibility, allowed us to streamline the design process and ensure consistency across both projects.

For the **E-Commerce Application**, Figma facilitated the creation of a responsive and intuitive user interface, optimized for both mobile and desktop platforms. The use of interactive prototypes allowed us to simulate user interactions, refining the shopping experience to meet customer expectations. Similarly, in the **Employee Task Manager**, Figma's component-based design system enabled us to design functional dashboards, detailed employee management views, and user-friendly navigation systems.

By leveraging Figma's collaborative tools, we were able to incorporate feedback from team members and stakeholders throughout the design process, ensuring that the final designs aligned with project goals. Its adaptability and feature set made Figma the ideal platform for efficiently executing the designs of these complex applications.

Features of Figma

1. **Component-Based Design**

- Figma allows designers to create reusable components, which are the foundation of **scalable and consistent design systems**.
- In the **E-Commerce Application**, components like product cards, buttons, and navigation menus were created once and reused across multiple pages, ensuring a cohesive look and feel.
- For the **Employee Task Manager**, components such as dashboards, employee profile cards, and modals streamlined the design process, reducing repetitive work and enabling quick iterations.
- Any updates made to a master component automatically reflected in all its instances, ensuring uniformity across the projects.

2. **Prototyping and Interactive Design**

- Figma's prototyping tools allowed us to simulate user interactions and test workflows directly within the application.

- In the **E-Commerce Application**, we used prototyping to map user journeys, such as browsing products, adding items to the cart, and completing checkout.
- For the **Employee Task Manager**, prototypes were used to test navigation flows, such as searching for employees, approving leave requests, and tracking attendance, ensuring a smooth user experience before development.

3. Cross-Platform Responsiveness

- Figma's responsive design tools made it possible to create designs that adapt seamlessly to different screen sizes.
- In the **E-Commerce Application**, we leveraged this feature to ensure that the interface worked perfectly on both mobile and desktop devices, maintaining usability and visual appeal across platforms.
- Although the **Employee Task Manager** was desktop-focused, responsive elements like collapsible sidebars and adjustable dashboards were designed for scalability.

4. Collaboration and Real-Time Feedback

- Figma's cloud-based platform enabled real-time collaboration among team members and stakeholders.
- During the design phase of both projects, feedback was shared directly on the designs, allowing for instant updates and refinements.
- This feature proved especially helpful for the **Employee Task Manager**, where multiple team members worked on refining data visualization and management interfaces.

5. Design Systems and Style Libraries

- Figma supports centralized design systems, making it easy to manage color palettes, typography, and other design elements.
- For the **E-Commerce Application**, we built a design system that included branding colors, button styles, and typography guidelines, ensuring a consistent and professional aesthetic throughout.
- In the **Employee Task Manager**, we used the same approach to standardize the design of tables, forms, and notification alerts, creating a cohesive interface for the desktop environment.

6. Auto Layout for Responsive Components

- Figma's **Auto Layout** feature allowed us to create flexible components that dynamically adjusted to changes in content size or layout.
- For example, in the **E-Commerce Application**, product cards and category grids were designed with Auto Layout to adapt to different screen widths and content variations.
- In the **Employee Task Manager**, dashboards and employee detail sections utilized Auto Layout to handle dynamic data inputs efficiently.

7. Version History and Iteration

- Figma's automatic version history feature enabled us to track design changes and revert to previous versions if needed.
- For both projects, this was particularly useful when experimenting with different layouts or addressing feedback from instructors and stakeholders.

8. **Plugin Integration**

- Figma's extensive plugin library enhanced our workflow by providing tools for quick asset management, icon libraries, and accessibility checks.
- Plugins like **Iconify** were used to add consistent icons across both projects, while accessibility tools helped us ensure the designs were user-friendly and inclusive.

Usages of Figma

Figma has become one of the most popular tools for UI/UX design and prototyping, and it plays a significant role in **Components Design**. Its versatility, accessibility, and powerful features make it an ideal choice for creating, managing, and reusing components key building blocks in modern design systems.

1. Efficient Component Creation and Management

- Figma allows designers to create **reusable components** such as buttons, input fields, cards, and icons.
- These components can be used across multiple frames, projects, and teams, ensuring design consistency and saving time.
- If a component is updated, all instances of it across the project reflect the changes automatically. This feature is particularly valuable when working on large-scale designs that require uniformity.

2. Scalable Design Systems

- Figma makes it easy to design and manage scalable systems by organizing **components, color styles, typography, and spacing** in one place.
- These systems can be shared across teams to maintain consistency in every project.
- For a **Components Design** course, Figma provides an ideal environment to practice creating and implementing design libraries.

3. Real-Time Collaboration for Teamwork

- In **Components Design**, collaboration is essential when multiple designers work on creating or refining reusable design elements.
- Figma's real-time collaboration allows team members to edit, comment, and give feedback simultaneously, ensuring seamless communication.
- Stakeholders or instructors can easily review components and suggest changes without delays.

4. Interactive Prototyping for Component Testing

- Figma's prototyping features make it easy to test components in real-world scenarios by linking them within interactive designs.
- This helps verify that components like buttons, navigation bars, or dropdowns function correctly and provide a smooth user experience.

5. Cross-Platform Accessibility

- Since Figma is browser-based, you can design and access your components anywhere, on any device.
- There's no need for high-performance hardware or specific operating systems, which makes it a practical choice for students and teams.

6. Auto Layout for Responsive Components

- Figma's **Auto Layout** feature allows components to adapt dynamically to content changes.
- This is crucial when designing responsive elements like cards or containers that need to adjust based on screen size, text length, or other variables.
- Auto Layout simplifies the process of creating components that work seamlessly across multiple devices.

7. Version Control and Feedback

- In **Components Design**, experimentation and feedback are crucial. Figma's automatic version history lets you revert to previous designs or compare changes.
- The commenting feature enables instructors, peers, or clients to provide feedback directly on specific components.

8. Extensive Plugin Support

- Figma's library of plugins helps accelerate the component design process. Tools for icons, stock images, and accessibility checks streamline workflows.
- For example, plugins like **Iconify** or **Unsplash** allow designers to quickly incorporate assets into components without leaving Figma.

Personal Project Examples

Project Title: Employee Task Management(Link)

The **Employee Task Management Application** is a desktop-based solution designed to streamline the management of employee data within an organization. This project focuses on creating an intuitive and user-friendly interface that allows HR professionals and managers to easily manage employee records, track attendance, and monitor performance.
Different Screens of the design:

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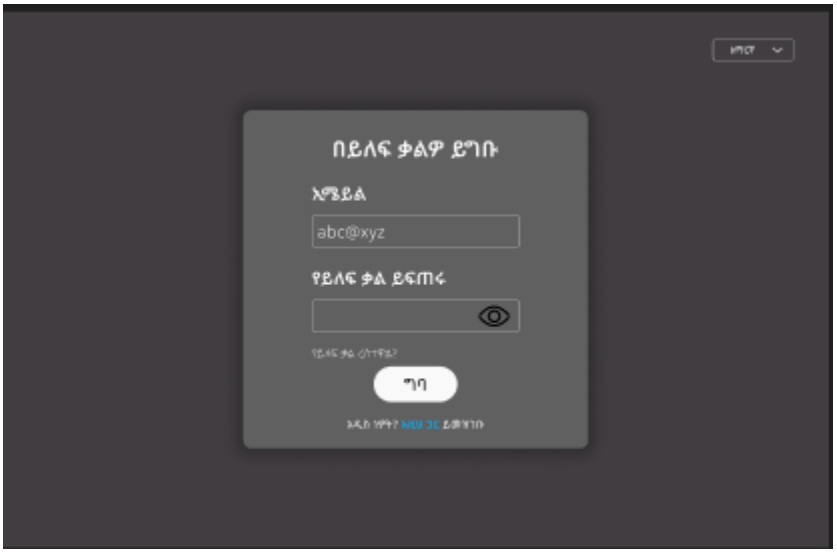
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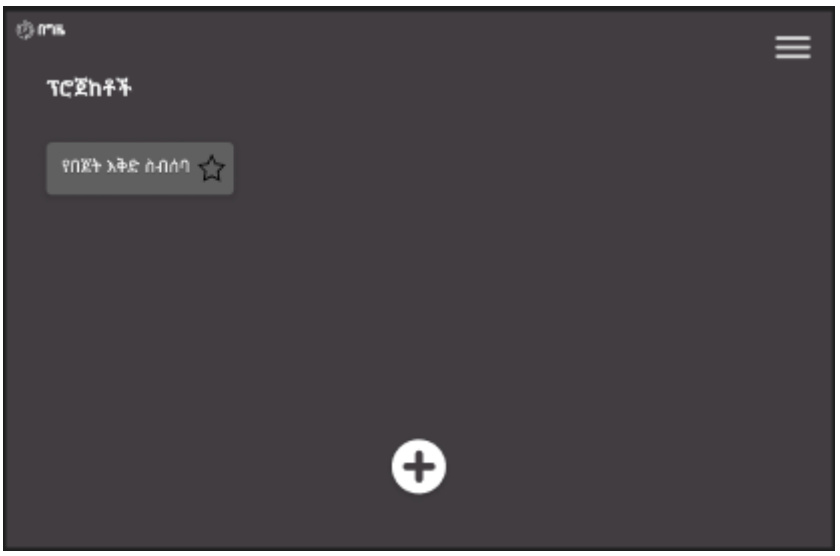
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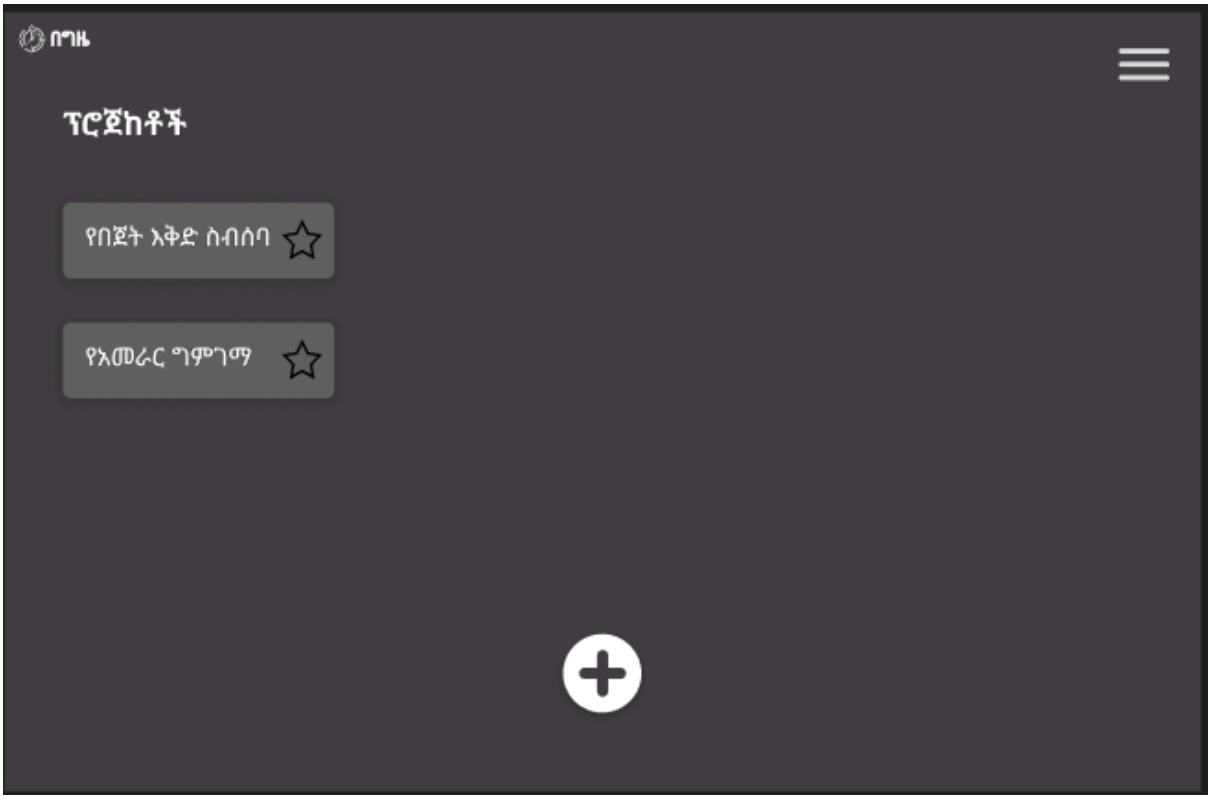
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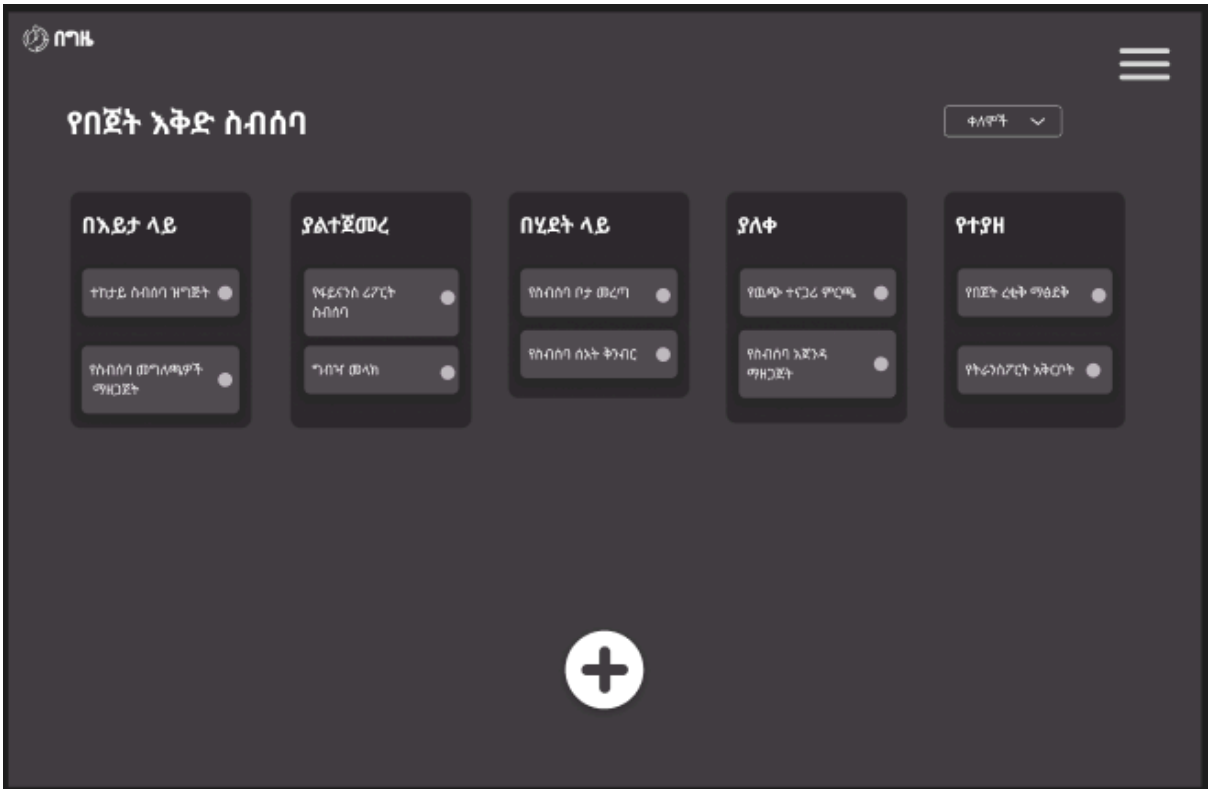
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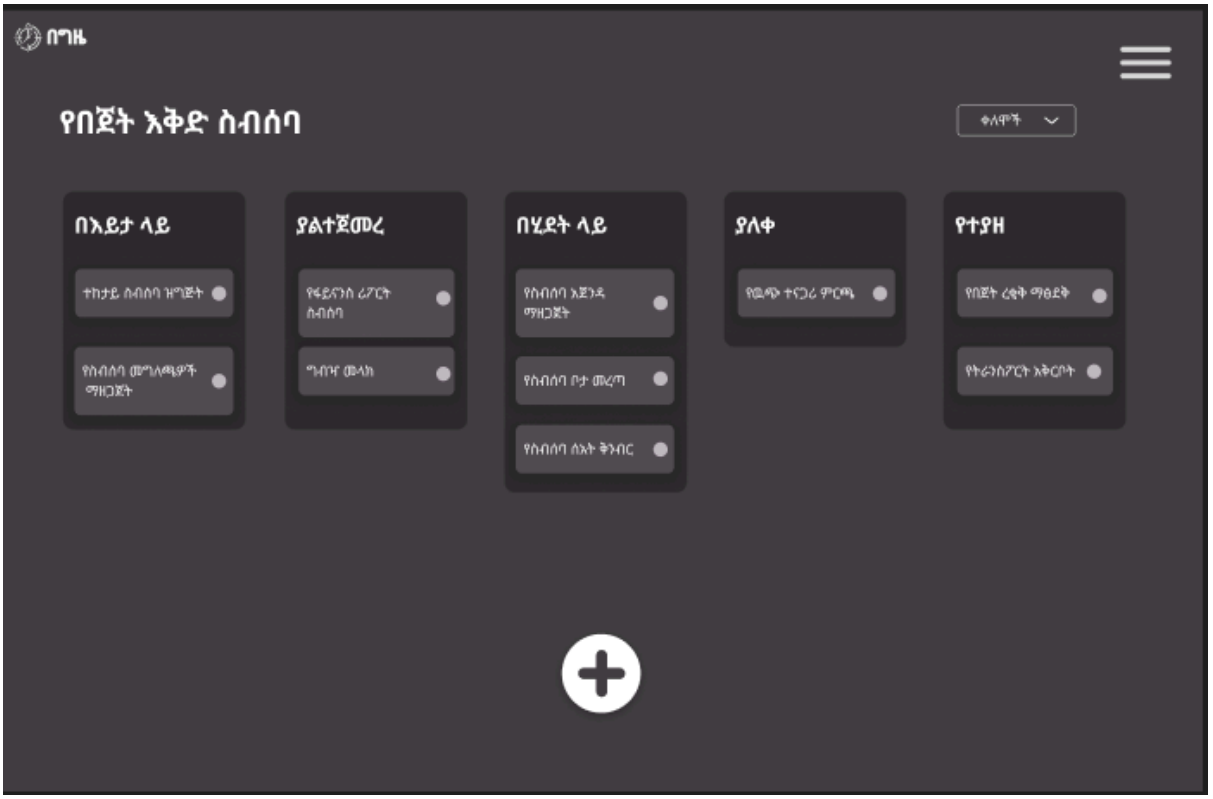
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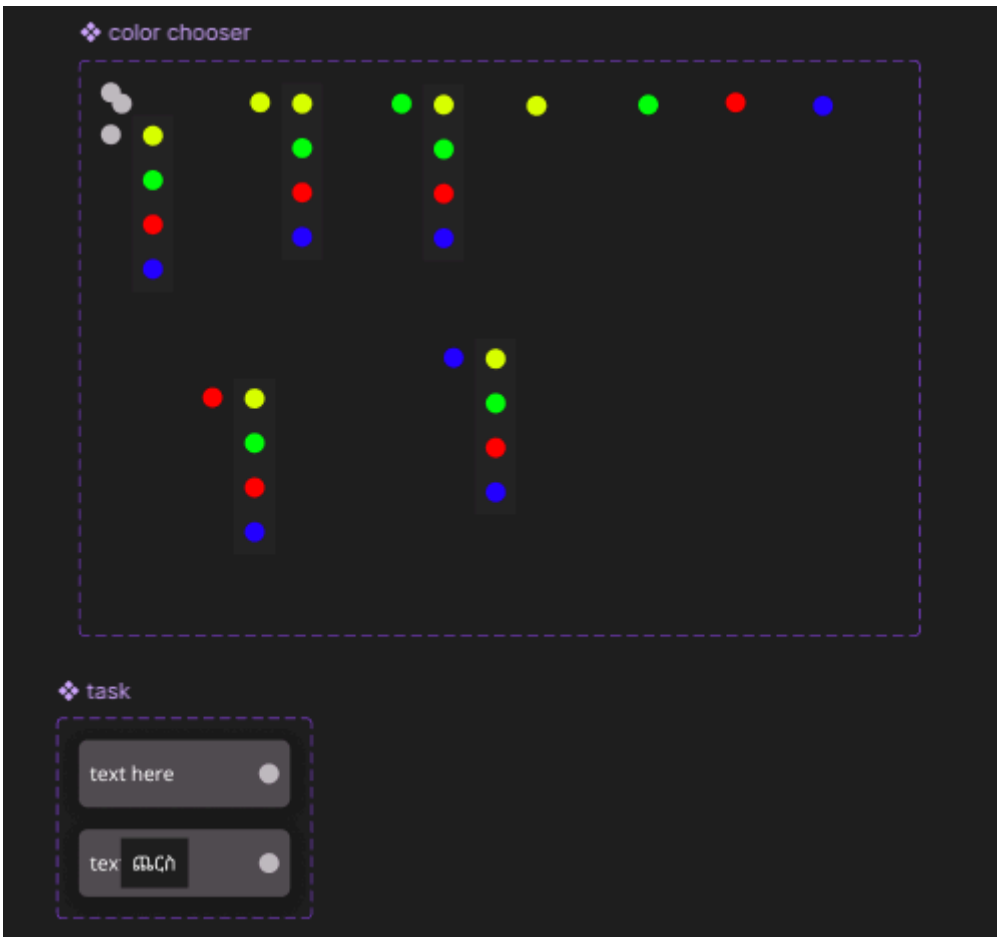
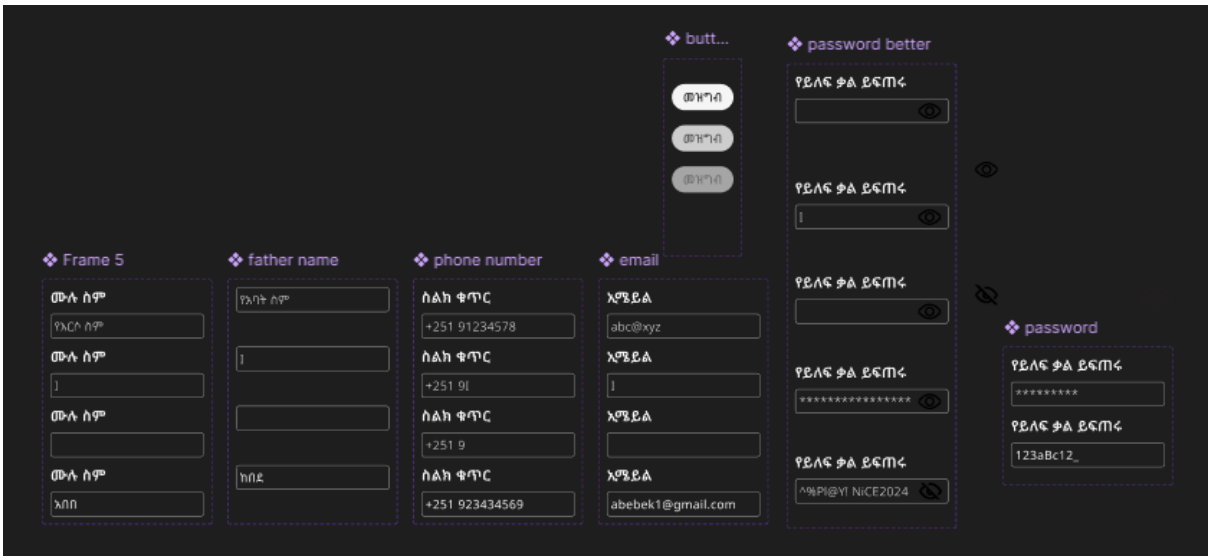
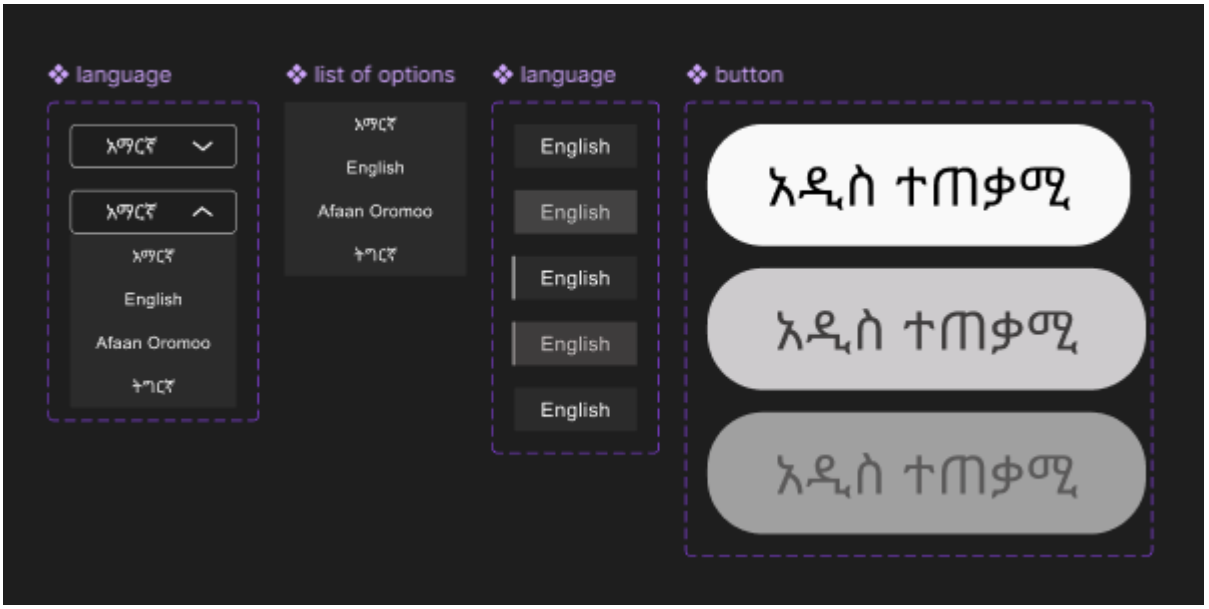


Pic: Color Chooser Component

Pic: Color Chooser Component with its description



Pic:Different Text Label components for different inputs



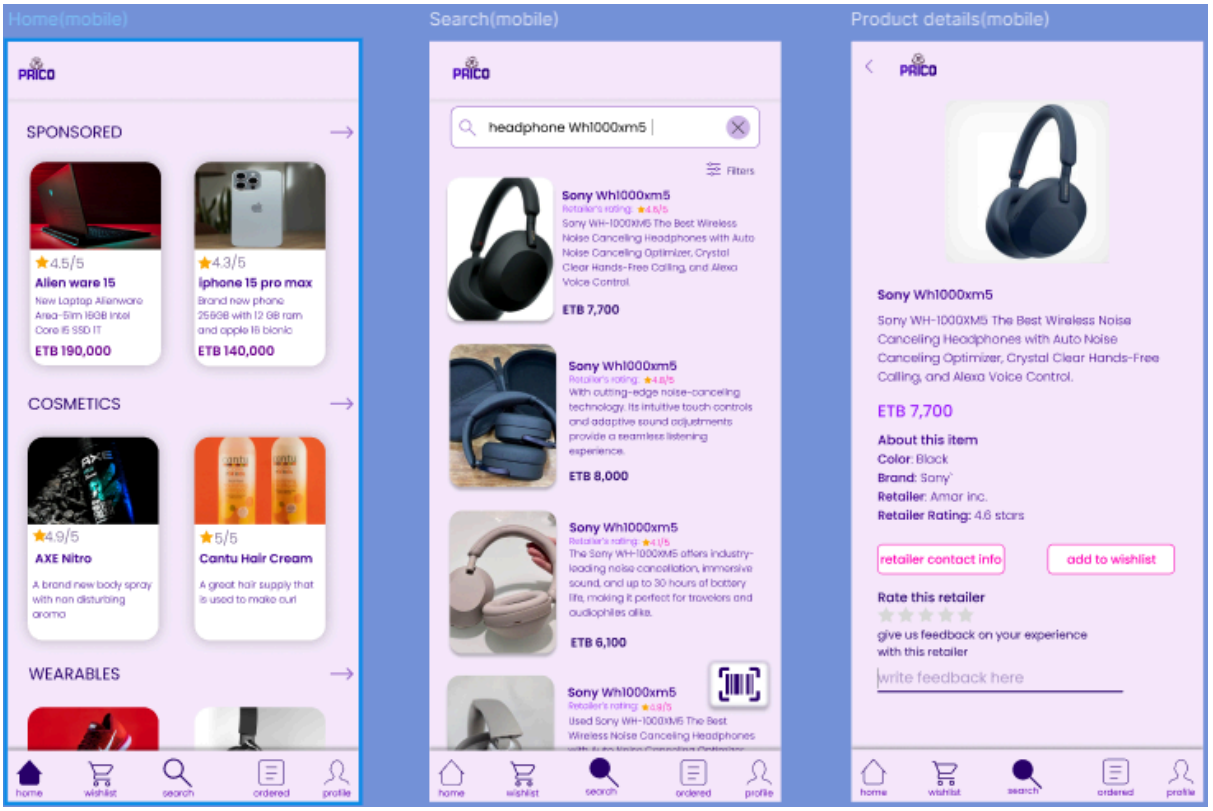
Pic: Language and New user adding button components

Project Title: Prico: An E-commerce Application(Link)

The **E-Commerce Application** is a cross-platform solution designed to provide a seamless shopping experience on both mobile and desktop devices. This project focuses on creating a responsive, intuitive interface for users to browse products, make purchases, and manage their accounts across various screen sizes.

Different Screens of the design:
(Mobile)

Landing(mobile)
PRICO
Sign in
continue as a guest
No internet(mobile)
PRICO
No internet connection
Try again
Login(mobile)
PRICO
Welcome back!
email
password
Forgot password?
Log in
create new account
Signup(mobile)
PRICO
Sign Up
first name
middle name
last name
email
password
confirm password
Sign up
Log in


Home(mobile)
PRICO
SPONSORED
4.5/5
Alien ware 15
New Laptop Alienware Area-51m 16GB Intel Core i5 SSD IT
ETB 190,000
4.3/5
iphone 15 pro max
Brand new phone 256GB with 12 GB ram and apple I6 bionic
ETB 140,000
COSMETICS
4.9/5
AXE Nitro
A brand new body spray with non disturbing aroma
5/5
Cantu Hair Cream
A great hair supply that is used to make curl
WEARABLES
home
wishlist
search
ordered
profile
Search(mobile)
PRICO
headphone Wh1000xm5
Filters
Sony Wh1000xm5
Retailer's rating: 4.6/5
Sony WH-1000XM5 The Best Wireless Noise Canceling Headphones with Auto Noise Canceling Optimizer, Crystal Clear Hands-Free Calling, and Alexa Voice Control.
ETB 7,700
Sony Wh1000xm5
Retailer's rating: 4.8/5
With cutting-edge noise-canceling technology, its intuitive touch controls and adaptive sound adjustments provide a seamless listening experience.
ETB 8,000
Sony Wh1000xm5
Retailer's rating: 4.8/5
The Sony WH-1000XM5 offers industry-leading noise cancellation, immersive sound, and up to 30 hours of battery life, making it perfect for travelers and audiophiles alike.
ETB 6,100
Sony Wh1000xm5
Retailer's rating: 4.8/5
Used Sony WH-1000XM5 The Best Wireless Noise Canceling Headphones
home
wishlist
search
ordered
profile
Product details(mobile)
PRICO
Sony Wh1000xm5
Sony WH-1000XM5 The Best Wireless Noise Canceling Headphones with Auto Noise Canceling Optimizer, Crystal Clear Hands-Free Calling, and Alexa Voice Control.
ETB 7,700
About this item
Color: Black
Brand: Sony
Retailer: Amar inc.
Retailer Rating: 4.6 stars
retailer contact info
add to wishlist
Rate this retailer
give us feedback on your experience with this retailer
write feedback here
home
wishlist
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ordered
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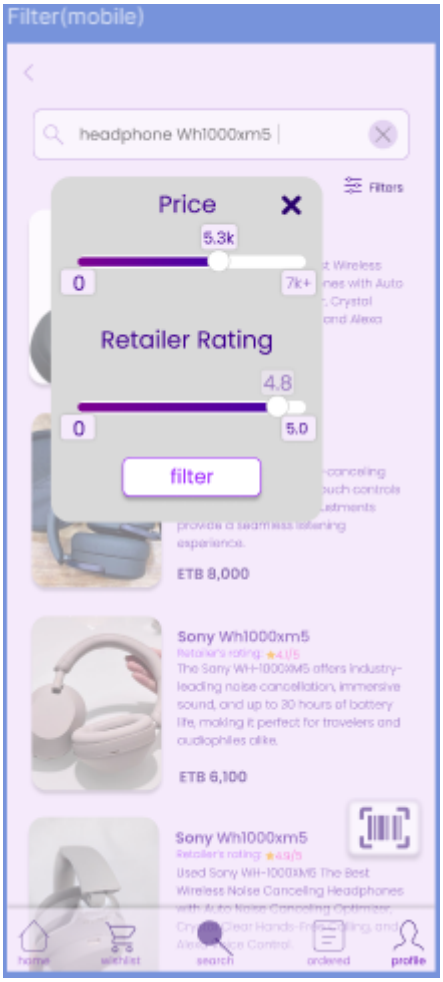
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Sony Wh1000xm5
The Sony WH-1000XM5 offers industry-leading noise cancellation, immersive sound, and up to 30 hours of battery life, making it perfect for travelers and audiophiles alike.
ETB 6,100
Sony Wh1000xm5
Used Sony WH-1000XM5 The Best Wireless Noise Canceling Headphones
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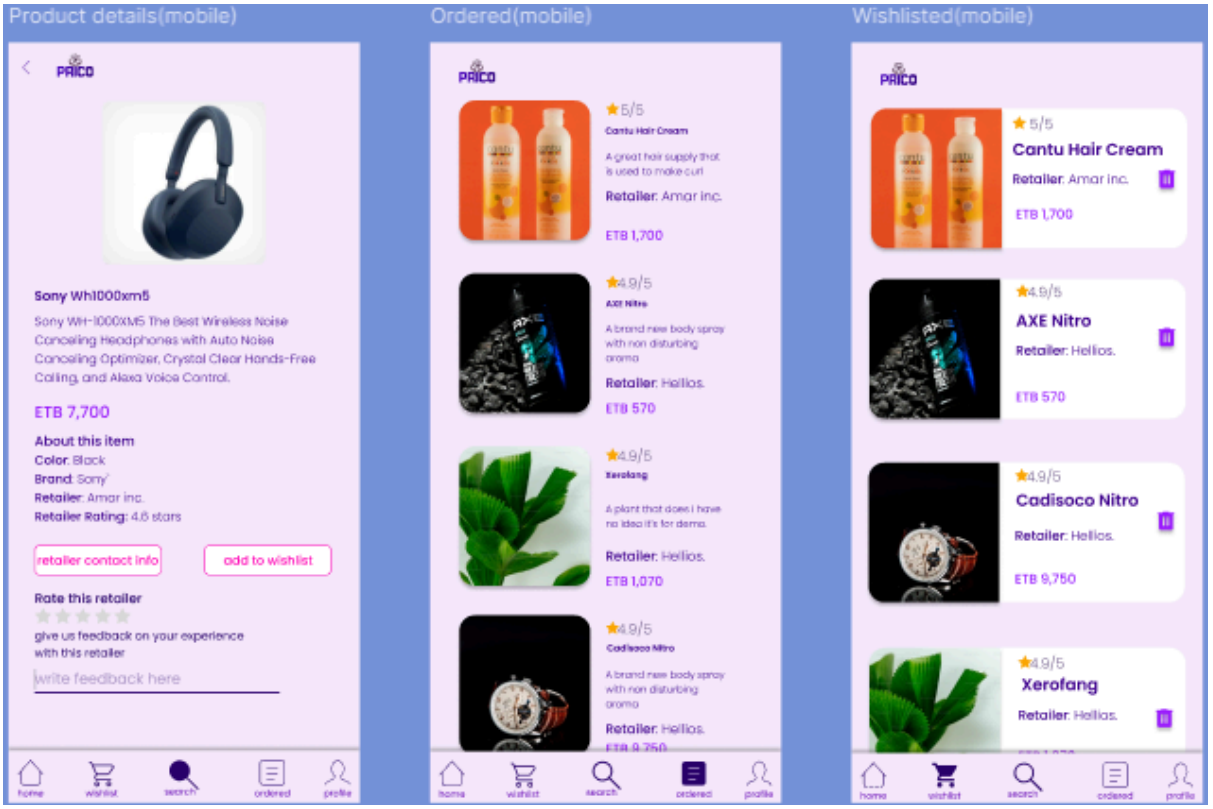
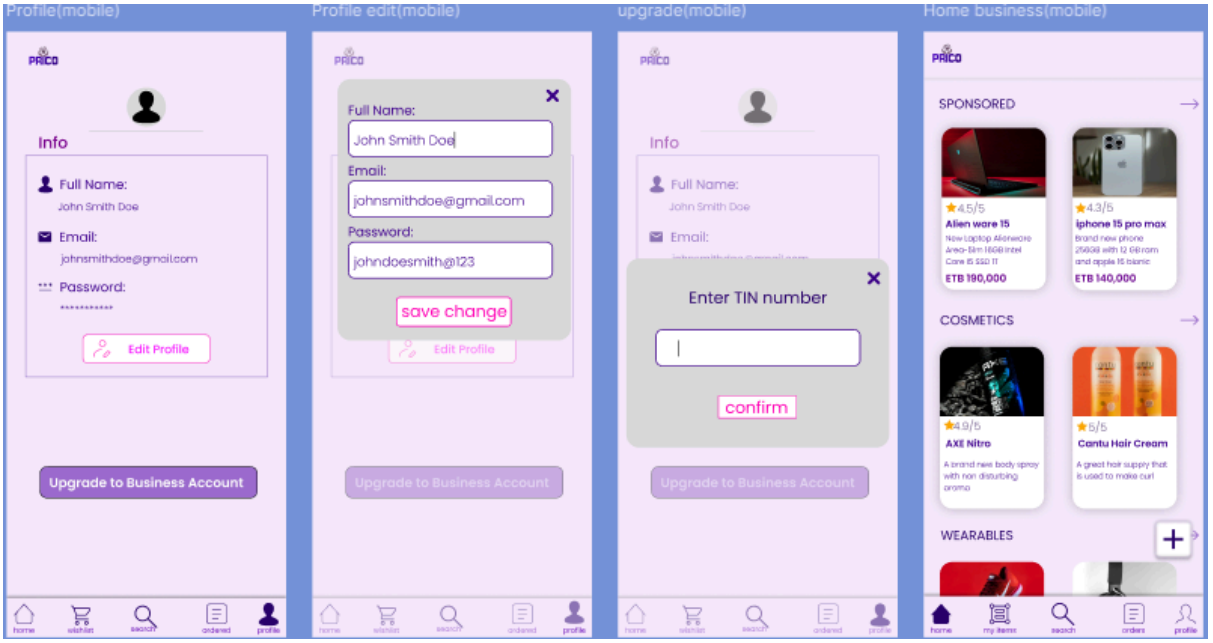
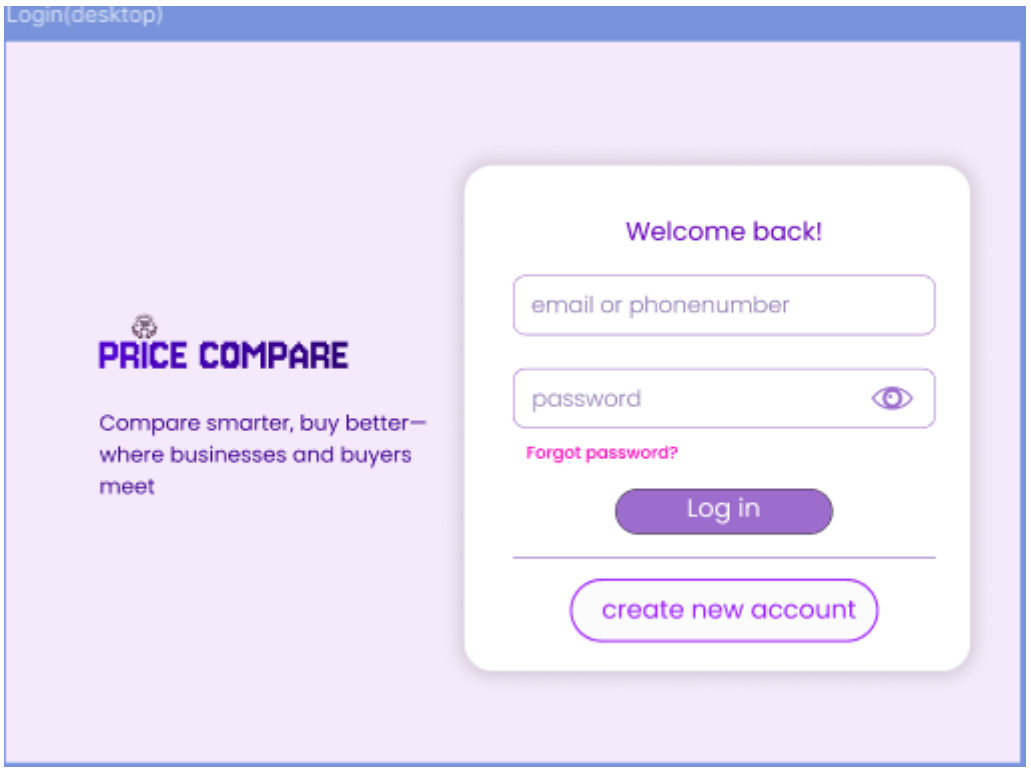

Product details(mobile)
Ordered(mobile)
Wishlisted(mobile)
PRICO
Sony Wh1000xm5
Sony WH-1000XM5 The Best Wireless Noise Canceling Headphones with Auto Noise Canceling Optimizer, Crystal Clear Hands-Free Calling, and Alexa Voice Control.
ETB 7,700
About this item
Color: Black
Brand: Sony
Retailer: Amar inc.
Retailer Rating: 4.8 stars
retailer contact info
add to wishlist
Rate this retailer
give us feedback on your experience with this retailer
write feedback here
Cantu Hair Cream
Retailer: Amar inc.
ETB 1,700
AXE Nitro
Retailer: Helios.
ETB 570
Cadisoco Nitro
Retailer: Helios.
ETB 9,750
Xerofang
Retailer: Helios.

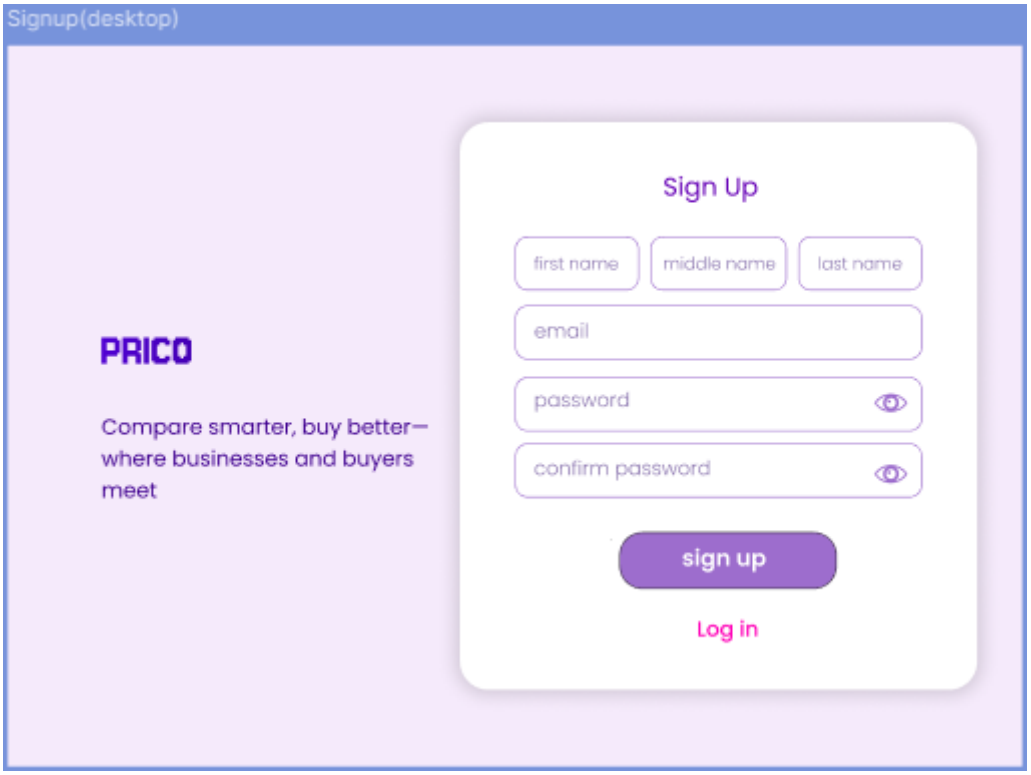

Profile(mobile)
Profile edit(mobile)
upgrade(mobile)
Home business(mobile)
PRICO
Info
Full Name:
John Smith Doe
Email:
johnsmithdoe@gmail.com
Password:
Edit Profile
Upgrade to Business Account
save change
Enter TIN number
confirm
SPONSORED
COSMETICS
WEARABLES
Alien wore 15
ETB 190,000
iphone 15 pro max
ETB 140,000
AXE Nitro
Cantu Hair Cream

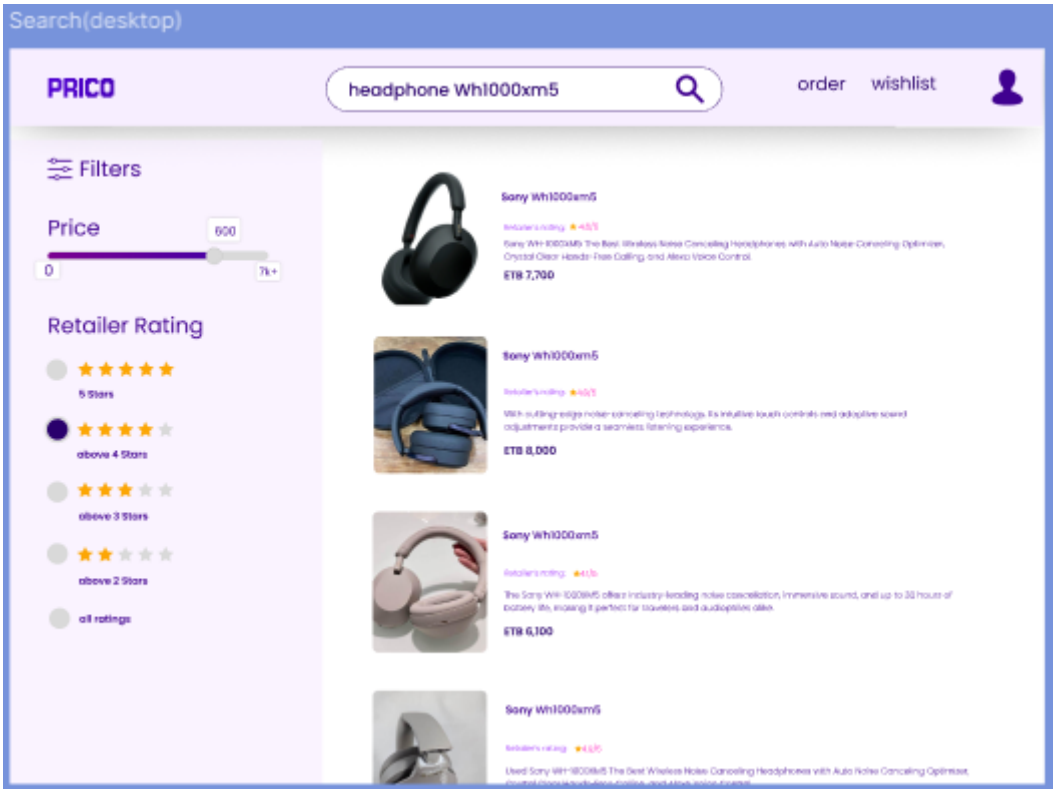
(Desktop)

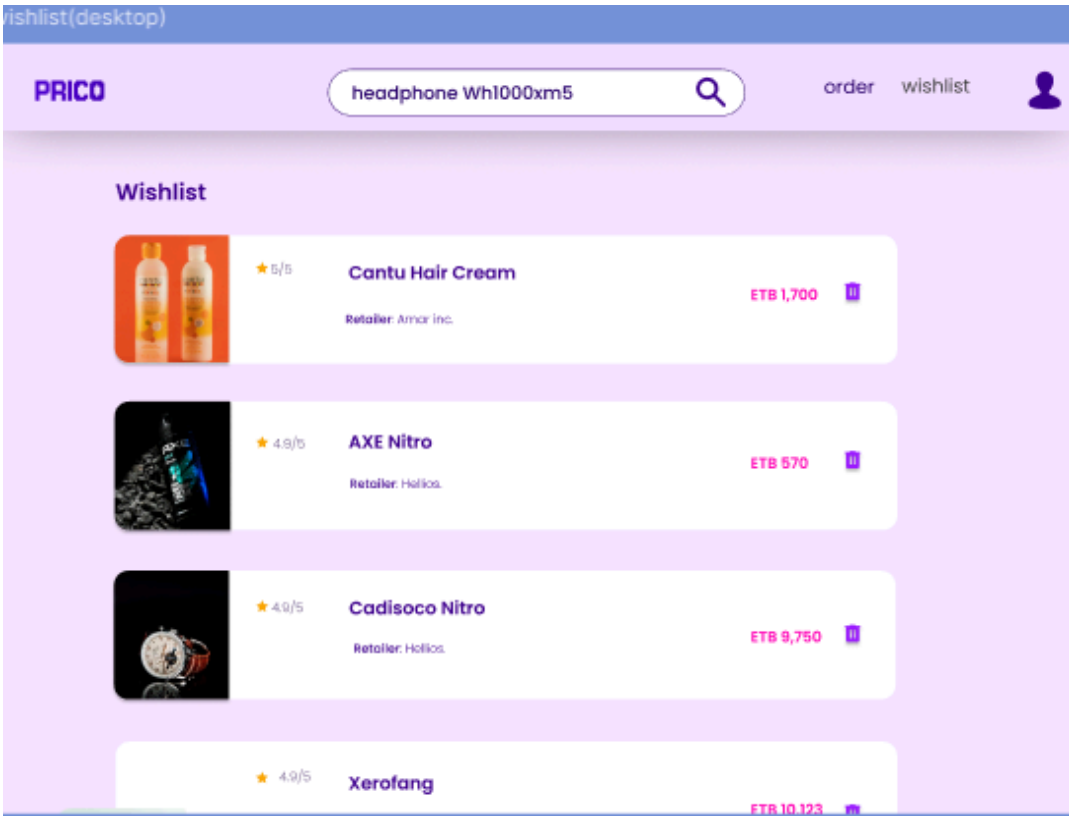
Login(desktop)

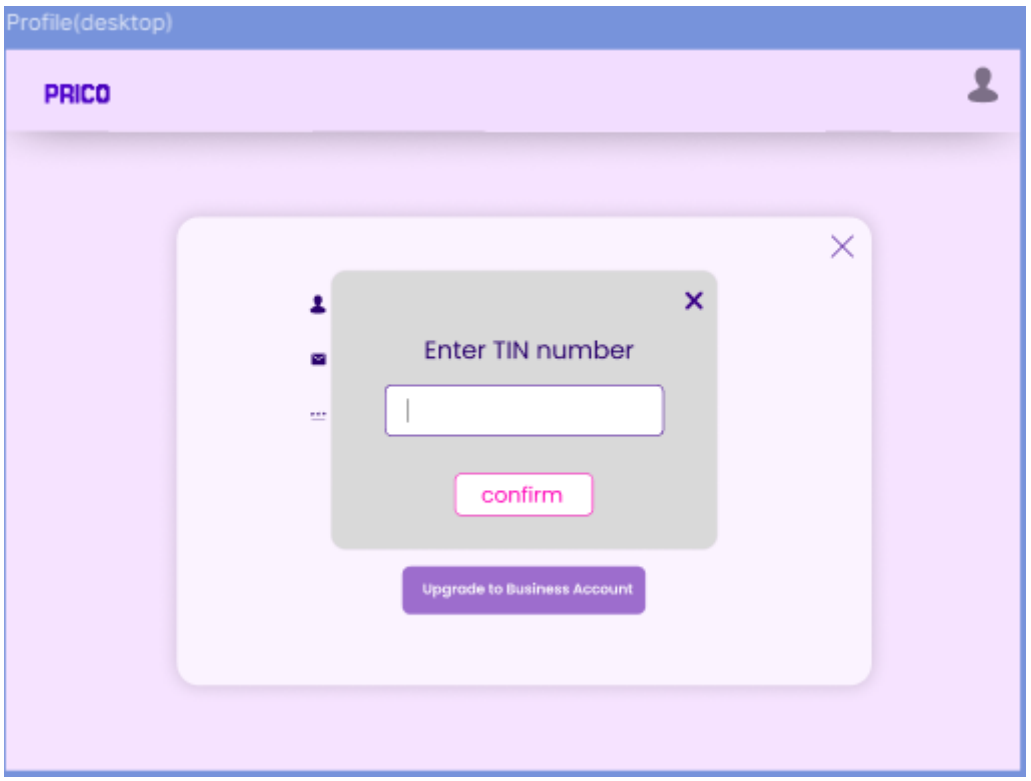


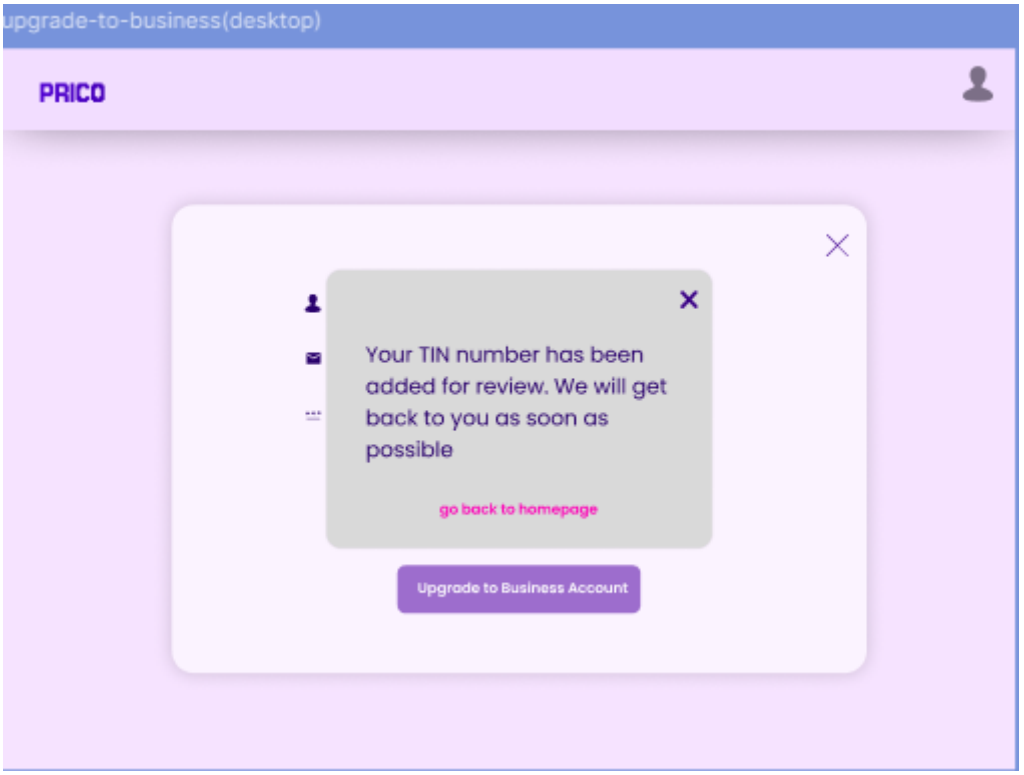
Signup(desktop)

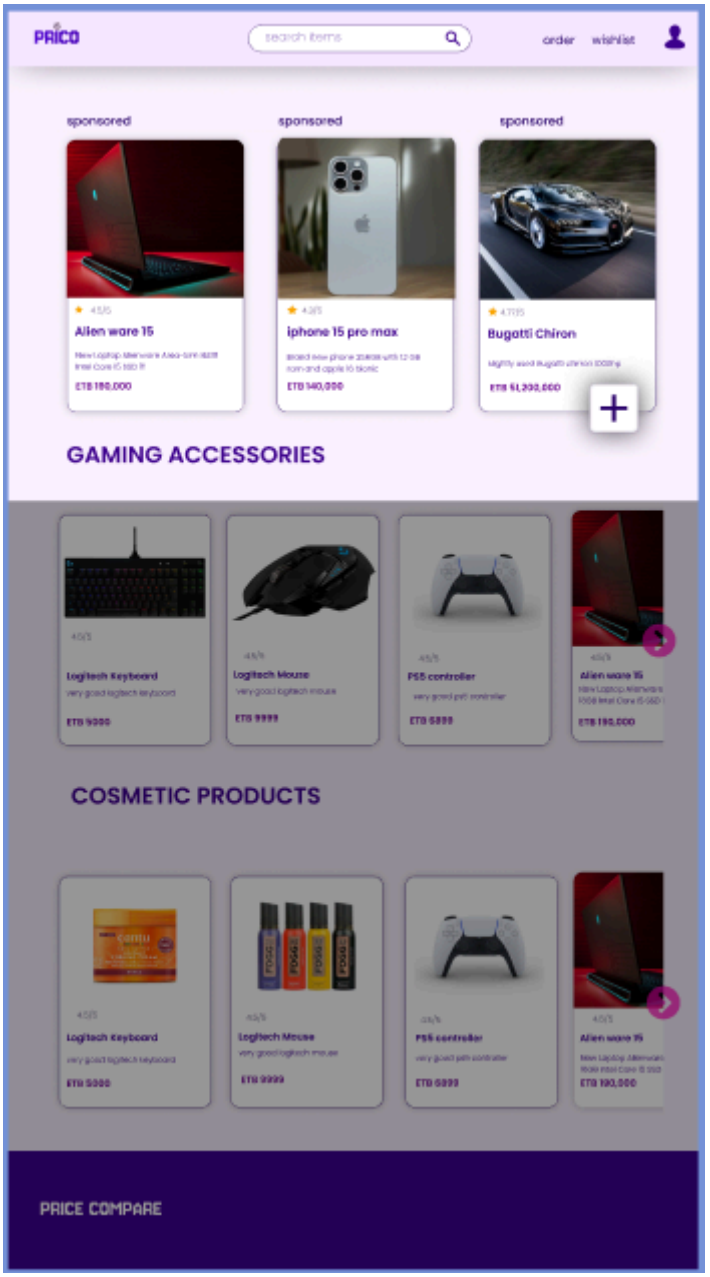


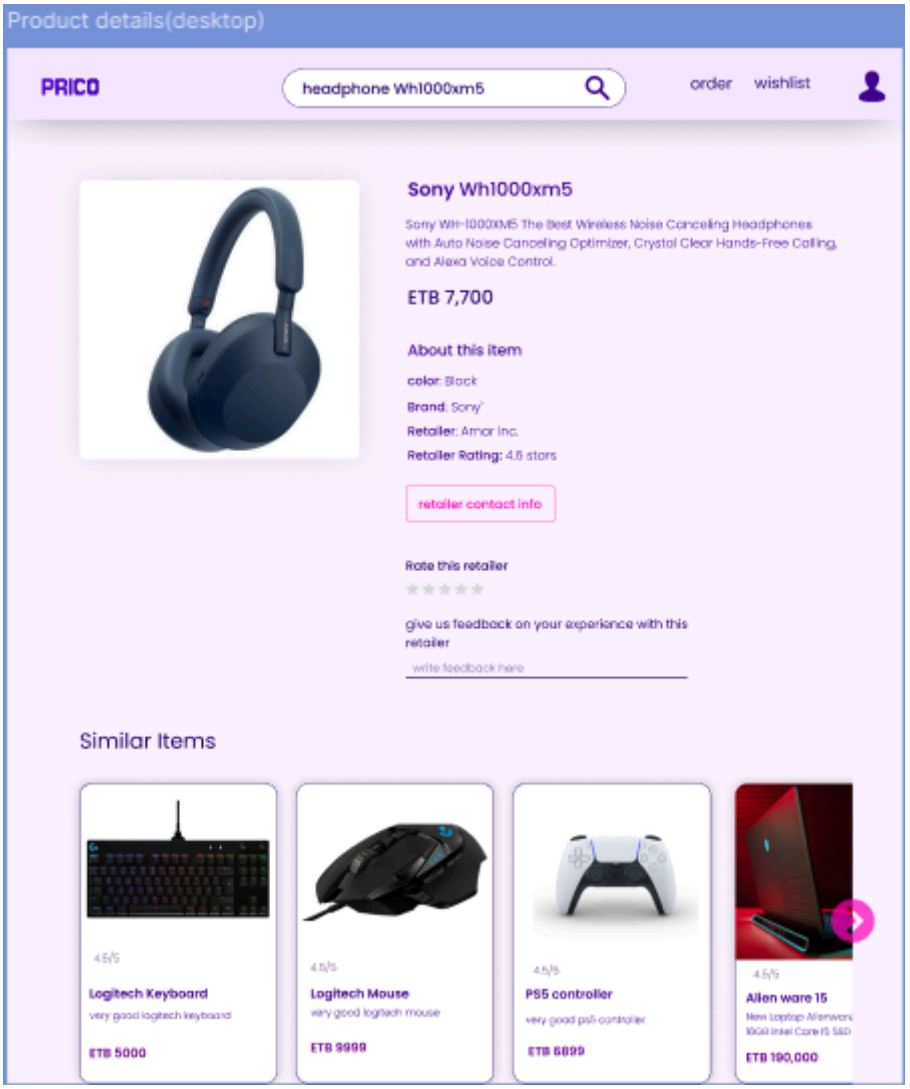

Search(desktop)
PRICO
headphone Wh1000xm5
order
wishlist
Filters
Price
600
0
7k+
Retailer Rating
5 Stars
above 4 Stars
above 3 Stars
above 2 Stars
all ratings
Sony Wh1000xm5
ETB 7,700
Sony Wh1000xm5
ETB 8,000
Sony Wh1000xm5
ETB 6,100
Sony Wh1000xm5

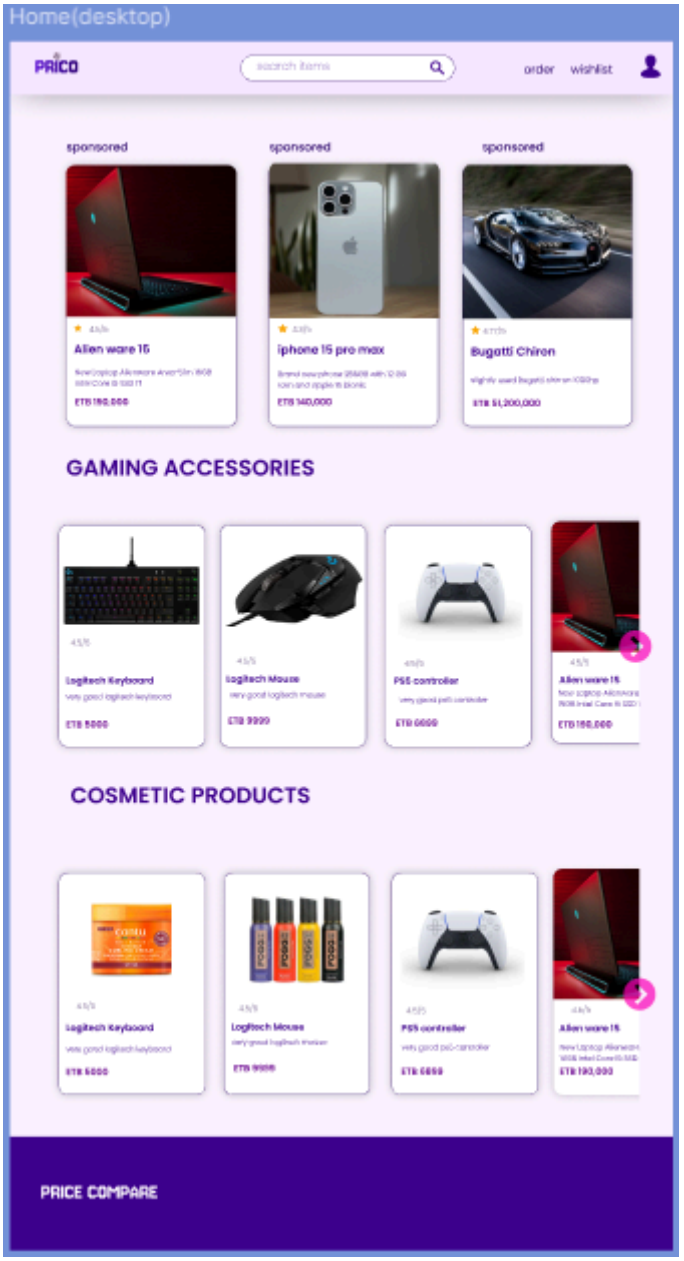

ishlist(desktop)
PRICO
headphone Wh1000xm5
order
wishlist
Wishlist
5/5
Cantu Hair Cream
Retailer: Amor inc.
ETB 1,700
4.9/5
AXE Nitro
Retailer: Helios.
ETB 570
4.9/5
Cadisoco Nitro
Retailer: Helios.
ETB 9,750
4.9/5
Xerofang


Profile(desktop)
PRICO
Enter TIN number
confirm
Upgrade to Business Account


upgrade-to-business(desktop)
PRICO
Your TIN number has been added for review. We will get back to you as soon as possible
go back to homepage
Upgrade to Business Account


PRICO
search items
order
wishlist
sponsored
sponsored
sponsored
Alien ware 15
ETB 180,000
iphone 15 pro max
ETB 140,000
Bugatti Chiron
GAMING ACCESSORIES
Logitech Keyboard
Logitech Mouse
PS5 controller
COSMETIC PRODUCTS
PRICE COMPARE


Product details(desktop)
PRICO
headphone Wh1000xm5
order
wishlist
Sony Wh1000xm5
Sony WH-1000XM5 The Best Wireless Noise Canceling Headphones with Auto Noise Canceling Optimizer, Crystal Clear Hands-Free Calling, and Alexa Voice Control.
ETB 7,700
About this item
color: Black
Brand: Sony
Retailer: Amor Inc.
Retailer Rating: 4.6 stars
retailer contact info
Rate this retailer
give us feedback on your experience with this retailer
write feedback here
Similar Items
4.5/5
Logitech Keyboard
very good logitech keyboard
ETB 5000
4.5/5
Logitech Mouse
very good logitech mouse
ETB 9999
4.5/5
PS5 controller
very good ps5 controller
ETB 6899
4.5/5
Alien ware 15
ETB 190,000


Home(desktop)
PRICO
order
wishlist
sponsored
sponsored
sponsored
Alien ware 15
iphone 15 pro max
Bugatti Chiron
GAMING ACCESSORIES
Logitech Keyboard
Logitech Mouse
PS5 controller
COSMETIC PRODUCTS
PRICE COMPARE

Conclusion

Figma has revolutionized the way designers approach UI/UX design, particularly in **Components Design**. Its cloud-based platform, real-time collaboration, and powerful design tools make it an indispensable tool for creating and managing reusable components. Figma not only streamlines the design process but also promotes collaboration, ensuring that all team members, stakeholders, and users are aligned throughout the project.

Figma provides the perfect environment to learn and apply key principles of component creation, design systems, and prototyping. Its intuitive interface, version control, and cross-platform accessibility ensure that students and professionals can focus on creativity while maintaining consistency and efficiency.

Ultimately, Figma empowers designers to build high-quality, responsive, and scalable designs, making it an essential tool for anyone looking to master modern design practices. By leveraging Figma's features, designers can create impactful, user-centered designs that meet both aesthetic and functional needs.

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- Coursera. "Introduction to UI/UX Design with Figma."
- YouTube. Channels such as *Flux Academy* and *DesignCourse*.