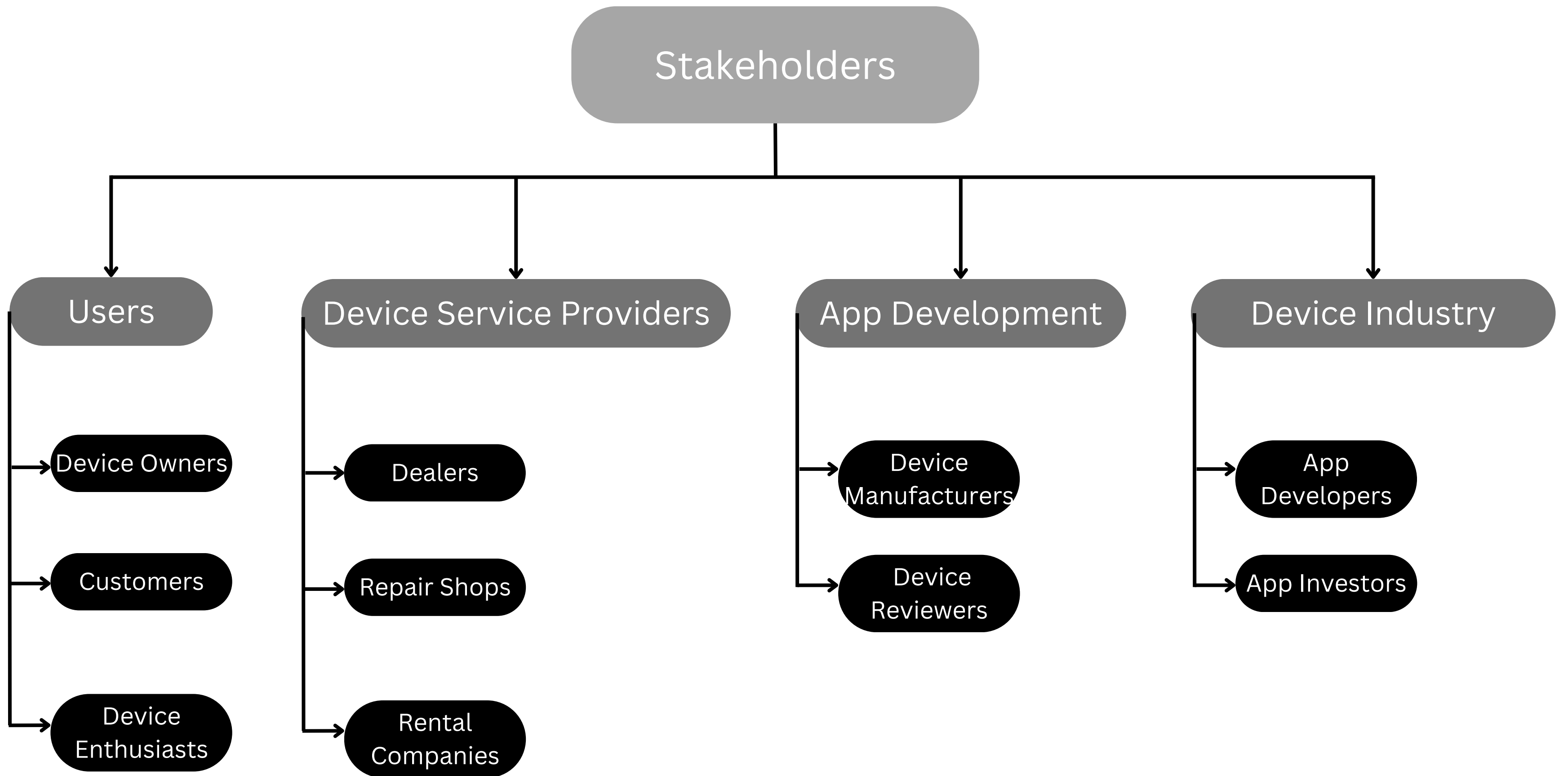


Software Product Introduction :

- Introducing our mobile app "**eletoo**" that offers a comprehensive solution for anyone who wants to buy, sell, repair, rent, trade, compare and stay up to date with device news. By providing a user-friendly interface and a range of features tailored to the needs of device owners, our app aims to simplify the device management process.
- Our app stakeholders are device owners, dealers, repair shops, rental companies and anyone else interested in accessing the latest devices and their features are part of our app stakeholders. Our app offers device owners a convenient platform to manage their devices, regardless of whether they want to buy, sell or repair them. Our app serves as a marketplace for sellers and device owners to get in touch with potential customers and expand their reach with the help of our application, workshops can advertise their offer and attract new customers. Finally, our app offers everyone interested in the latest gadgets a comprehensive shop to compare devices and keep up to date with the latest market trends.
- A mobile app with these features is essential in today's world. With the growing number of devices on the market, it can be difficult for device owners to keep up with the latest features and manage their devices effectively. Our app provides a convenient shop where users can buy, sell, trade, lease, repair and compare devices to solve these problems. The app is a key tool in the device industry as it simplifies the device management process for everyone involved.



Project Team

Mouayad Haji Omar



Contact details

FIRST NAME	Mouayad
LAST NAME	Haji Omar
ADDRESS	Lehmkaulweg 75 66119 Saarbrücken, Germany
E-MAIL	Mouayad-1991@hotmail.com
PHONE	0049(0)15754961812

Education and qualifications

SINCE 2020	Studies of Applied Computer Science (B.Sc.) Hochschule für Technik und Wirtschaft (University of Applied Sciences), Saarbrücken, Germany
------------	---

Skills

IT skills

Programming Languages:
Java, C/C++, C# and
Blueprint Visual Scripting in
Unreal Engine.
Basics of JavaScript, HTML,
CSS and MySQL.

Languages

Arabic (native language),
English (B2),
German (C1)

Interests and activities

- Modding video games (e.g. using the Creation Engine Kit of Bethesda Softworks Game Studio).
- Game development using 3D computer graphics software and game engines.

Muthanna Haji Omar

PERSONAL DETAILS

FIRST NAME : Muthanna

LAST NAME : Haji Omar

+49 15759017473
muthanna93mho10@gmail.com
Rubensstr.46
66119 Saarbrücken, Germany

EDUCATION AND QUALIFICATIONS

SECONDARY SCHOOL

Amar Ben Yasser High School

2008 - 2012

BACHELOR OF TECHNOLOGY

BIOMEDICAL TECHNOLOGY

University of Applied Sciences in Saarbrücken

SINCE 2020

FOCUS

Physiks, Mathematics, English

INTERESTS AND ACTIVITIES

Radiography, Python, MATLAB

SKILLS


Artist
Sculptor
Microsoft Office (Word, Excel)

persona

Persona requirements extraction is a process used in software development to identify the characteristics and behaviors of users who interact with the software. Furthermore, it helps developers to build products that meet their users' needs and expectations.

For this purpose, we created two fictional characters depending on the USER type to help us better understand with our users' perspectives.

Karim Khoudeir



"I'm looking for an application that will simplify the search for my gaming setup."

Age: 21
Work: Student
Family: single
Location: Germany
Character: The Frequent Flyer

Organized

Practical

Protective

Hardworking

Bio

Karim is a bachelor student, he is studying physiotherapy, he enjoys playing computer games and for the past couple of years, has been very interested in the new devices like new monitors, pc etc... Karim dose start spending too much time on many websites to track the new development of devices and decide which is the best device for him, the level of income of karim is not helpful to buy expensive new devices.

Personality

Introvert	Extrovert
Analytical	Creative
Loyal	Fickle
Passive	Active

Preferred Channels

Chrome	
Mobile	
Email	
Traditional Ads	

Goals

- To enjoy the best new games without spending a lot of money.
- To spend less time on websites searching for devices.

Frustrations

- Too much time spent to find the best required device.
- Too many websites visited to compare devices.
- The high price of the new devices.

Motivation

Price	
Comfort	
Convenience	
Speed	
Loyalty/Miles	

Brands

KAYAK

ACE HOTEL

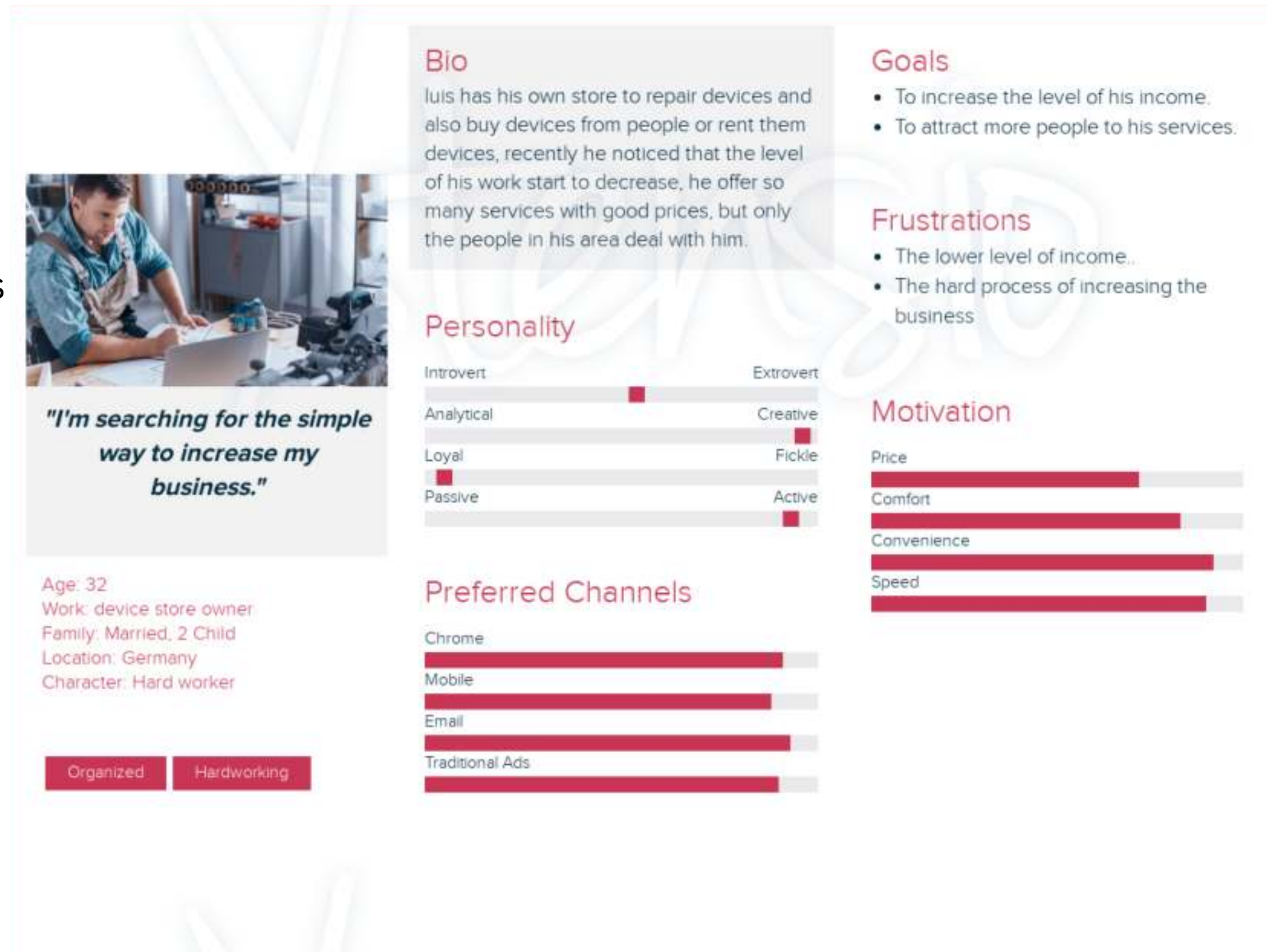
Expedia

lyft

persona

Persona requirements extraction is a process used in software development to identify the characteristics and behaviors of users who interact with the software. Furthermore, it helps developers to build products that meet their users' needs and expectations.

For this purpose, we created two fictional characters depending on the USER type to help us better understand with our users' perspectives.



interview questions

list of demographic information we want to collect:

Age range

Age range can help us understand Age-related differences and the preferences of our users.

Gender identity

Knowing our users' gender identity can help us build software that is suitable for them.

Income level or budget

Understanding our users' budgets can help us create affordable and accessible software and products for them.

Geographic location or time zone

Knowing our users' location or time zone can help us develop software that fits their local context.

Language

The language of our users can help us to identify translation needs.

Technical expertise

This information can help us design software that matches the technical skill level of our users and make our software product more user-friendly.

Personal or professional goals

Knowing the goals of our users can help us to identify any possible features or improvements that can help them achieve their goals.

interview questions

Introduction:

- What do you think about an App that allow you to buy, sell, repair and compare devices instead of searching online ?

Worm-up:

- What are the advantages and disadvantages of buying devices online ?

Main body:

- Which App would you use to buy or sell technical devices?
- Why this App attract you?
- Which problems did you face using this app?
- Which functionalities do you find really hard to understand and why (user-friendly) ?
- If you have the opportunity using an App to repair, exchange or rent devices, which futures are the most needed for you?
- Why these futures ?

interviewer

List of participants for the interview

Name : Houssein Fadel
Age : 24
Gender : male
Education level : Bachelor economics
Work status : student
Country: Germany

Name : Omar Nouh
Age : 21
Gender : male
Education level : Bachelor civil engineer
Work status : student
Country: Germany

Name : Ali Omar
Age : 21
Gender : male
Education level : mechanical engineering
Work status : device store owner
Country: Germany

Name : Rama Kassar
Age : 21
Gender : female
Education level : Bachelor informatics
Work status : student
Country: Germany

Name : Bilal Ali
Age : 23
Gender : male
Education level : Bachelor informatics
Work status : student
Country: Germany

interviewer

**key findings from
Interviews:**

Most interviewers use
Websites to buy, sell or
trade devices.

Most interviewers face
problems to find
websites with the
devices exchange
functionality.

The software product
should be user-friendly
and easy to use without
many complexities.

Interviewers dislike the
complexity of the
current websites they
have visited.

Interviewers expect
better experiences with
the new mobile
software product.

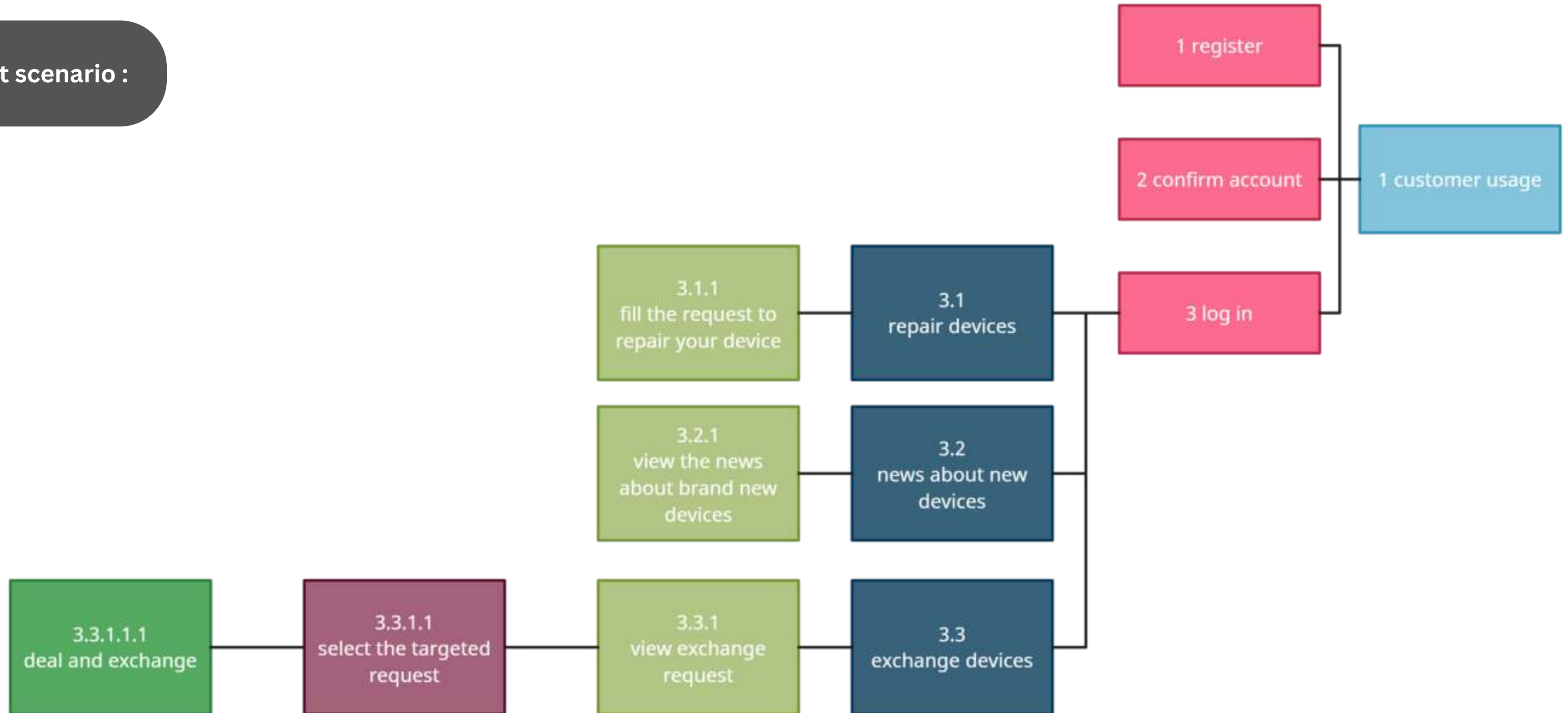
Requirements Extraction scenarios

First scenario :

Karim Khoudeir is a dedicated physiotherapy student studying in Germany who enjoys gaming in his free time. Unfortunately, he recently encountered a problem with his computer when his monitor broke down, preventing him from playing his favorite games. With limited funds, Karim was unable to purchase a brand new monitor and struggled to find a solution online. However, he came across an app called Eletoo that provides a unique repair functionality. Instead of buying a new monitor, Karim was able to easily use the app to send his broken monitor to a repair shop, saving him a considerable amount of money. The app's repair feature enabled Karim to conveniently send his monitor for repairs and get it back in working condition no time. Now, Karim can continue his gaming hobby due to Eletoo's convenient features. As a result of his positive experience with the Eletoo app, Karim has since become interested in its other functionalities. Therefore, he discovered the app's "News" feature, where he saw news about a gaming mouse that he liked, Karim couldn't afford this gaming mouse so he discovered another functionality called "Exchange", which allows users to exchange devices with one another. As a gamer, Karim was interested in using the gaming mouse he saw on news, but didn't want to spend a lot of money on buying a brand new one. With the exchange feature, he was able to find another user who was willing to exchange the gaming mouse he saw on news for his. Overall, Karim is very happy with the Eletoo app and its various features. It has allowed him to save money by repairing his monitor and exchanging his gaming mouse, providing him with a convenient and user-friendly platform for his gaming needs.

Requirements Extraction scenarios hierarchical task analysis

First scenario :



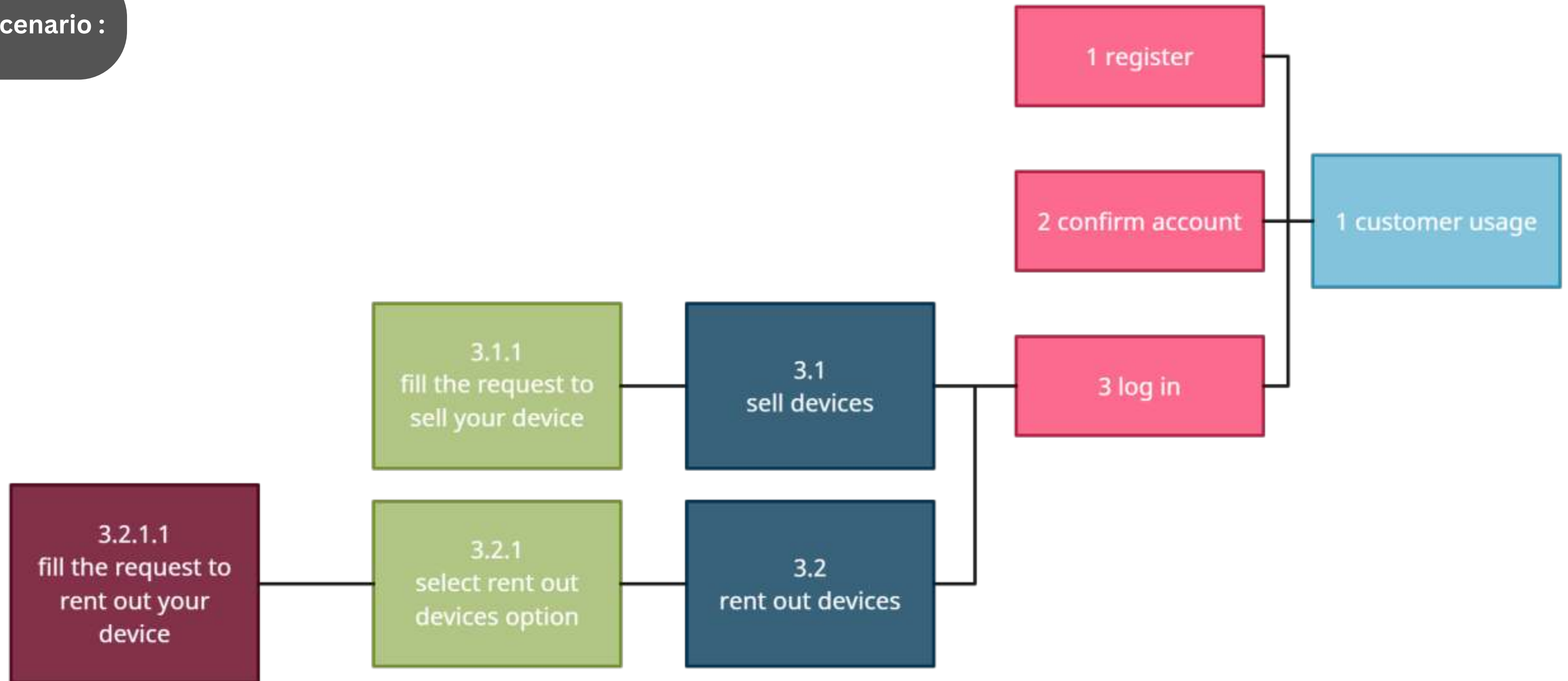
Requirements Extraction scenarios

Second scenario :

Luis is a technician who runs a device store where customers come to get their devices fixed. Recently, he noticed that his store was not generating enough income or attracting enough customers. He searched online for a solution but had trouble finding one. That's when he discovered the Eleteo app and its sell feature. Luis realized that he could sign up his store as a sell shop on the app, which would allow users to easily find and contact his store to buy devices and even rent devices from his store. He decided to give it a try, and after signing up, he noticed a significant increase in customers coming to his store. As a result, his business expanded rapidly, and he began to generate more income. Luis is now very happy with the Eleteo app, which has helped him improve his business and expand his devices store. Because of the Eleteo's sell feature, he was able to reach more customers and grow his business in ways that he couldn't before.

Requirements Extraction
scenarios
hierarchical task analysis

Second scenario :



Founded Requirements

As a result of our interviews we got the opportunity to collect information to identify the required functionalities of the software product:

Type of Requirments	List of Requirments
Usability Requirments	<ul style="list-style-type: none">• The app will be designed for mobile devices and is not compatible with desktop computers. It will be available on the Google Play Store for Android devices and the Apple App Store for iOS devices
Functional Requirments	<ul style="list-style-type: none">• The user can buy devices• The user can sell devices• The user can repair his/her device by sending it to repair shops• The user can safely exchange devices with other users• The user will be able to rent devices• The user will have the opportunity to stay up-to-date with the latest news and information about devices• The user can compare devices with each other to find the better device
Non-Functional Requirments	<ul style="list-style-type: none">• The app will require account creation and confirmation• The app will require an account with a strong password

Low-fi prototype paper prototyping

Welcome and main functions



**Low-fi prototype
paper prototyping**

buy function



Low-fi prototype
paper prototyping

repair function



**Low-fi prototype
paper prototyping**

news about new devices function



**Low-fi prototype
paper prototyping**

sell function



Low-fi prototype
paper prototyping

rent function



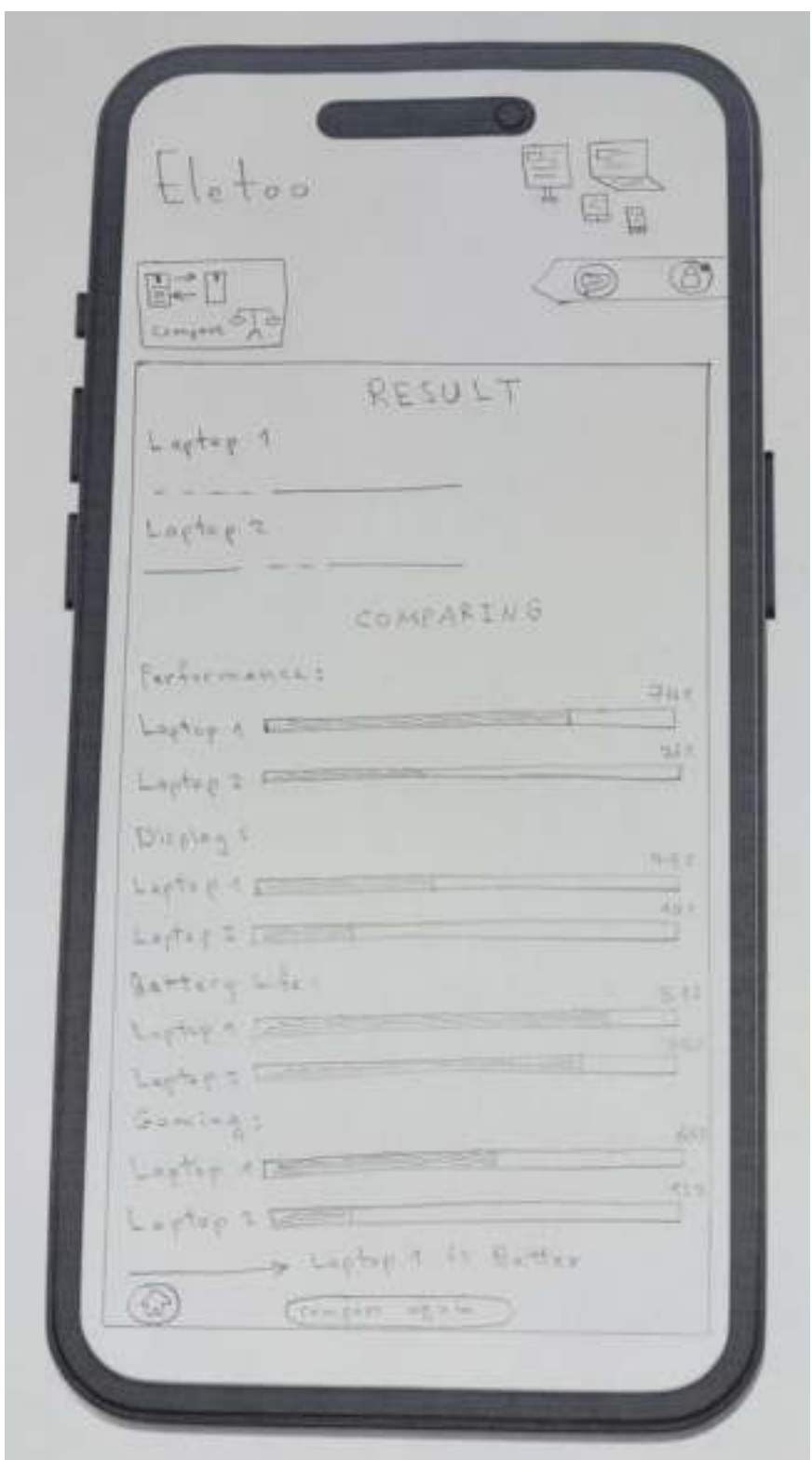
Low-fi prototype
paper prototyping

rent out function



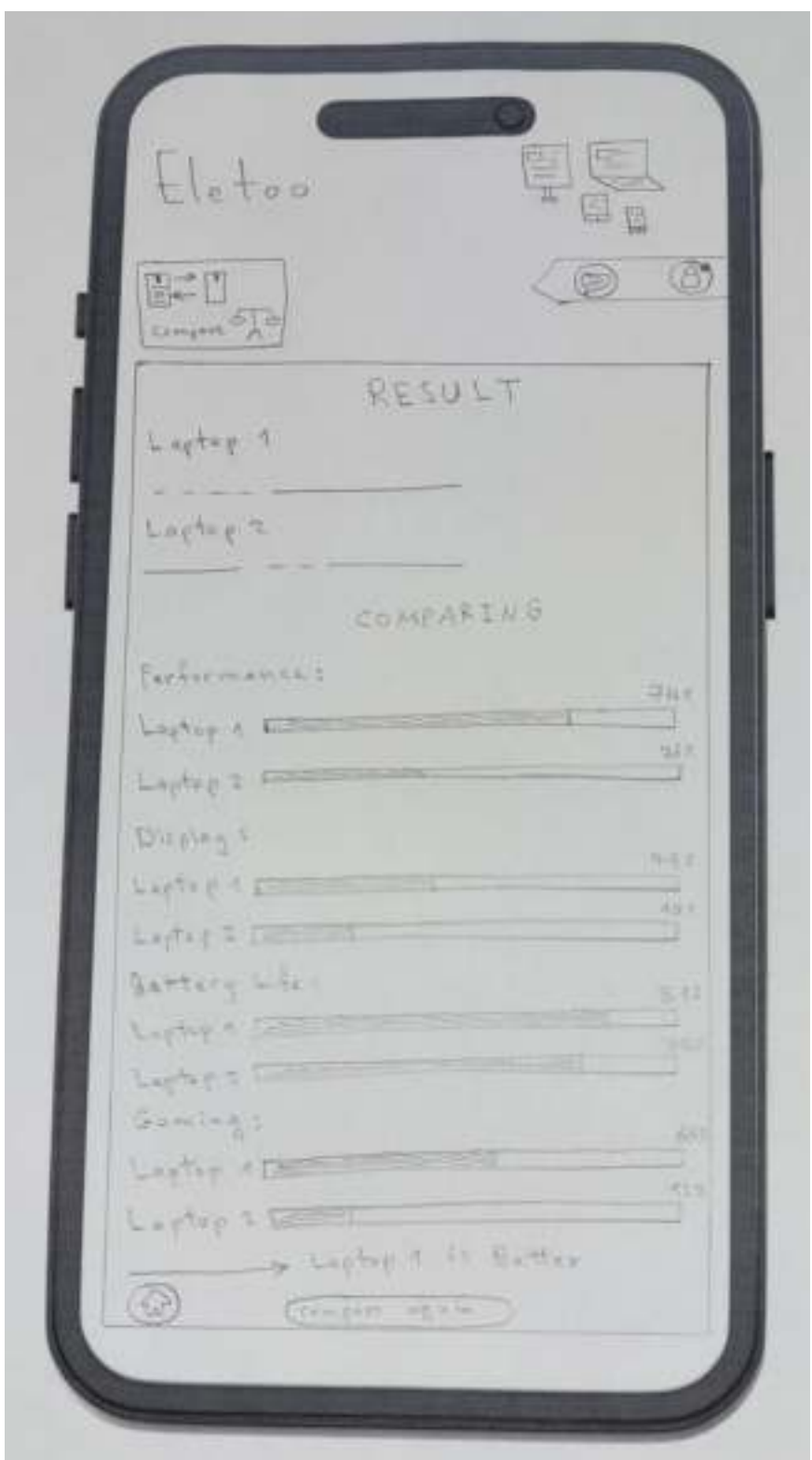
Low-fi prototype
paper prototyping

compare function



Low-fi prototype
paper prototyping

compare function

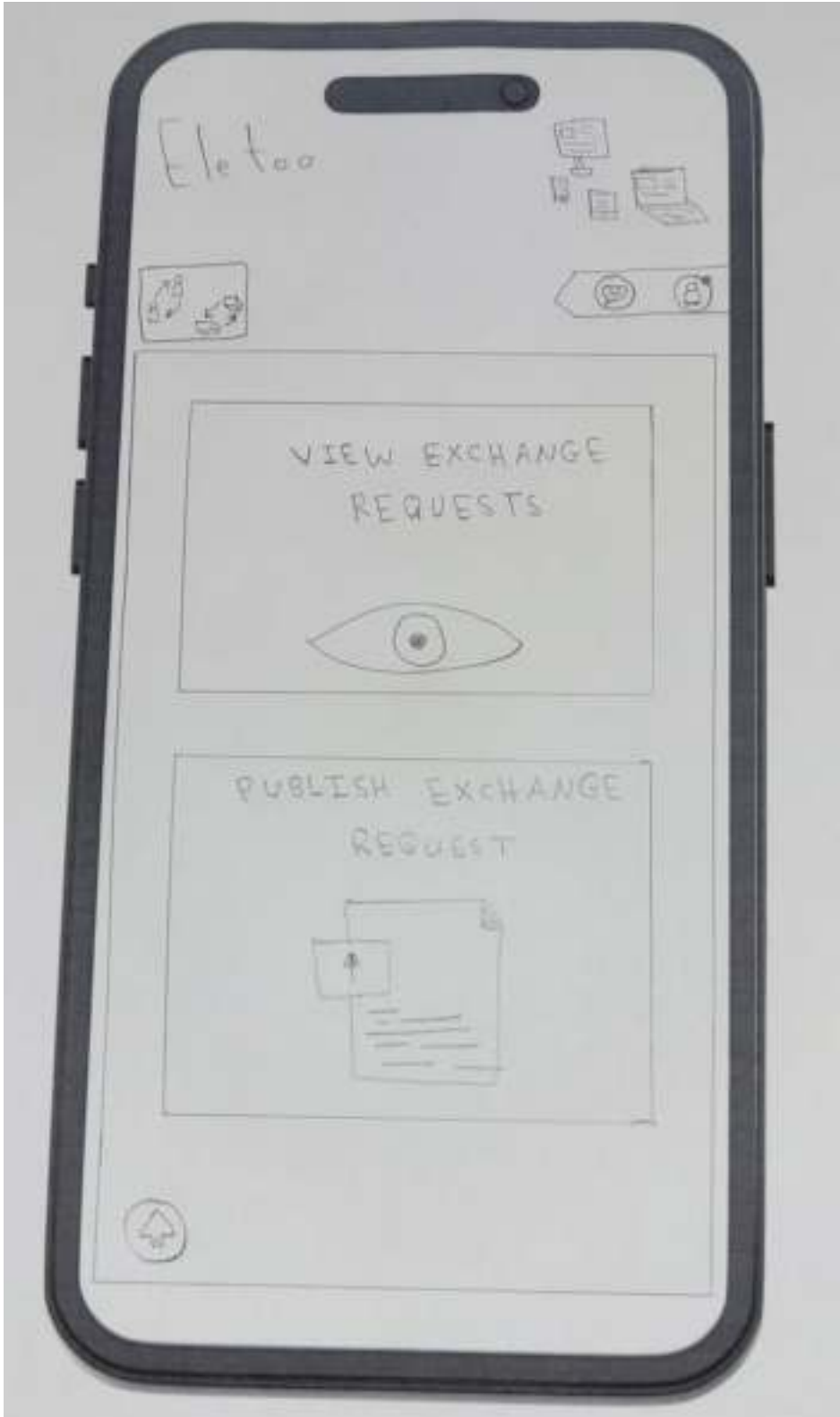


Low-fi prototype
paper prototyping

exchange function

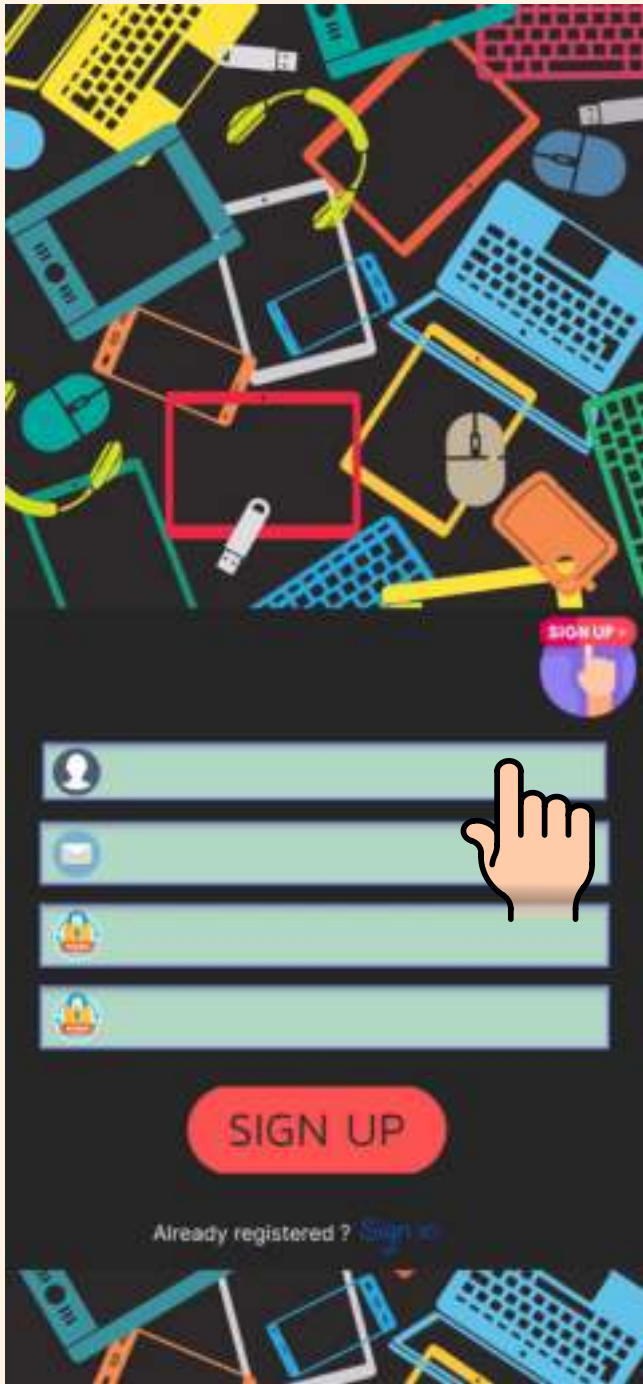
exchange with existing request

make your own request



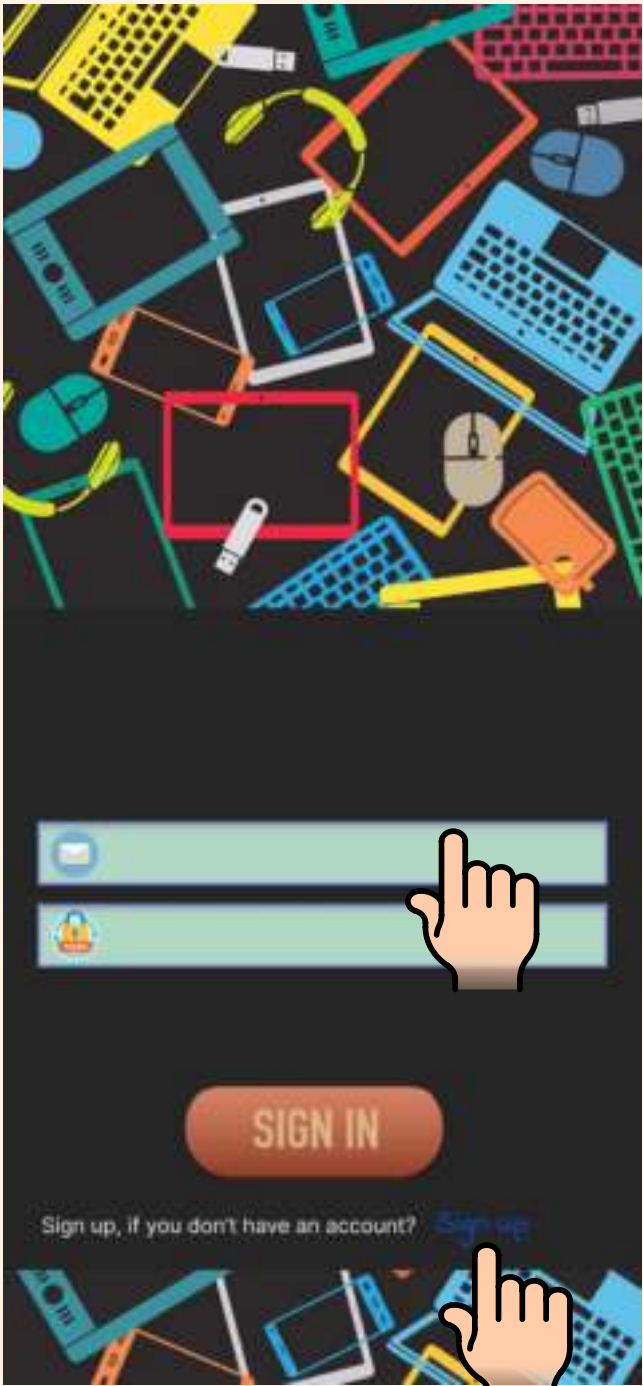
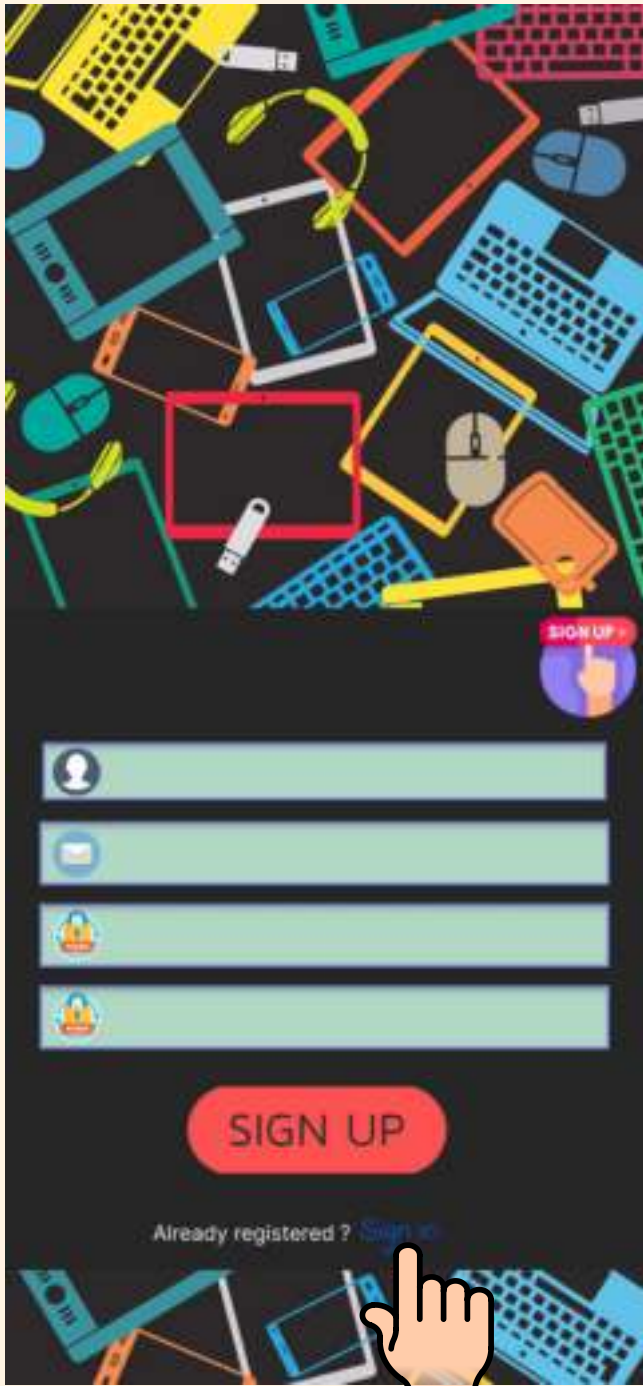
Hi-fi prototype visual prototyping

Sign up



Hi-fi prototype
visual prototyping

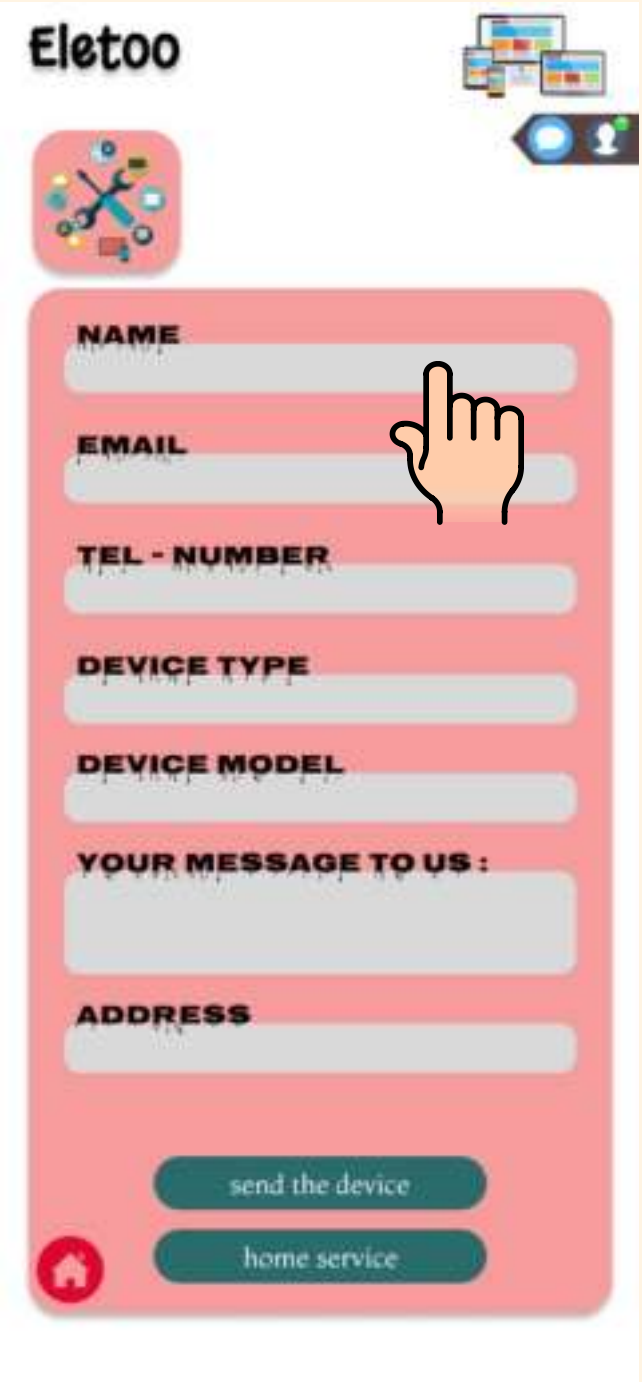
Sign in



if you want to sign up again

Hi-fi prototype
visual prototyping

repair function



Hi-fi prototype
visual prototyping

repair function

Eletoo



NAME

Muthanna Haji Omar

EMAIL

muthanna93@hotmail.com

TEL - NUMBER

+49 34*****

DEVICE TYPE

laptop

DEVICE MODEL

MSI Katana GF76 12UD-041

YOUR MESSAGE TO US :

ADDRESS

send the device

home service

Eletoo



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ADDRESS

Saarbruecker str.78 66134 Saarbruecken

send the device

home service

1

2

Hi-fi prototype
visual prototyping

repair function

2

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DEVICE TYPE

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YOUR MESSAGE TO US :

ADDRESS

Saarbruecker str.78 66134 Saarbruecken

request finished thank you
you will receive a call soon to arrange
appointment

back to home page

1

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Saarbruecker str.78 66134 Saarbruecken

AVAILABLE COMP/STORES

2

finish



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finish



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YOUR MESSAGE TO US :

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Saarbruecker str.78 66134 Saarbruecken

AVAILABLE COMP/STORES

2

request finished thank you



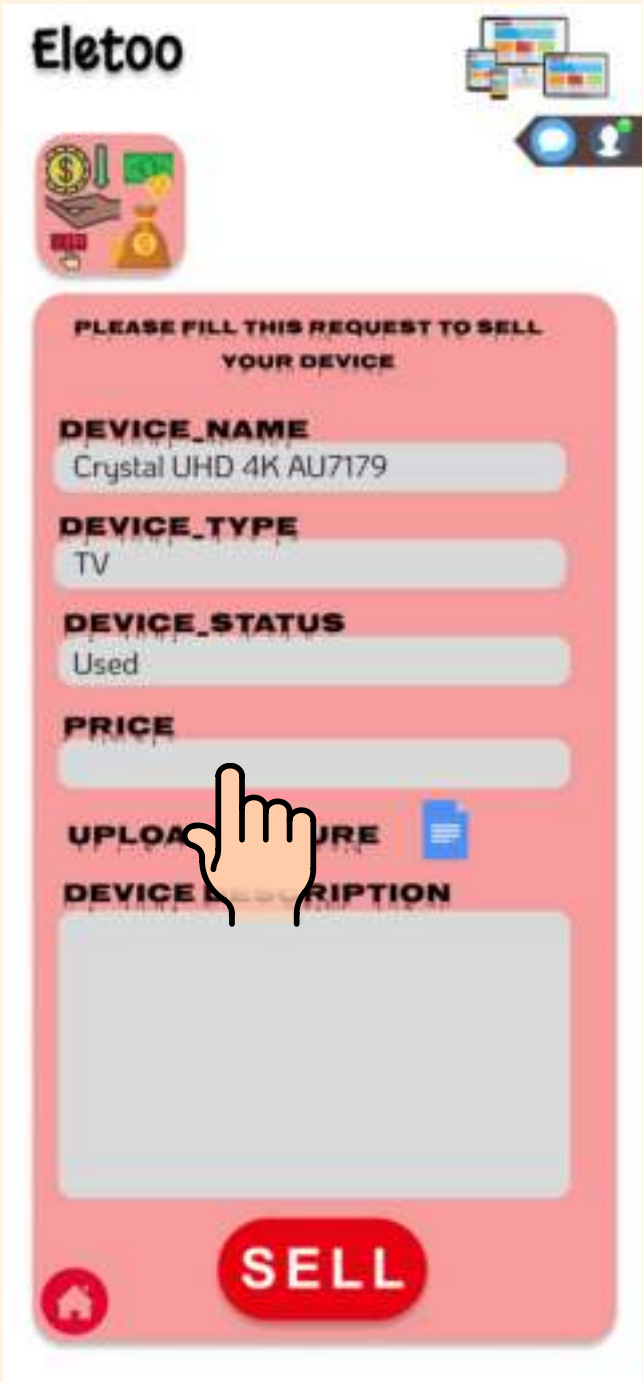
Hi-fi prototype
visual prototyping

buy function



Hi-fi prototype
visual prototyping


Sell function



Hi-fi prototype
visual prototyping

Sell function

Eletoo



PLEASE FILL THIS REQUEST TO SELL YOUR DEVICE

DEVICE_NAME

Crystal UHD 4K AU7179

DEVICE_TYPE

TV

DEVICE_STATUS

Used

PRICE

199.99 \$

UPLOAD PICTURE



DEVICE DESCRIPTION

SELL

Eletoo



PLEASE FILL THIS REQUEST TO SELL YOUR DEVICE

DEVICE_NAME

Crystal UHD 4K AU7179

DEVICE_TYPE

TV

DEVICE_STATUS

Used

PRICE

199.99 \$

UPLOAD PICTURE

image.png

DEVICE DESCRIPTION

SELL

Eletoo



PLEASE FILL THIS REQUEST TO SELL YOUR DEVICE

DEVICE_NAME

Crystal UHD 4K AU7179

DEVICE_TYPE

TV

DEVICE_STATUS

Used

PRICE

199.99 \$

UPLOAD PICTURE

image.png

DEVICE DESCRIPTION

Screen Size: 55 inches
Brand: Samsung
Supported Internet services: WLAN, LAN
Display technology: UHD
Product dimensions: 18.5D x 73.2W x 47.9H centimetres
Resolution: 4K Refresh rate: 60 Hz
Special feature: Smart / Internet
Model name: GU55AU7179UXZG
Included components: GU55AU7179UXZG

SELL

Eletoo





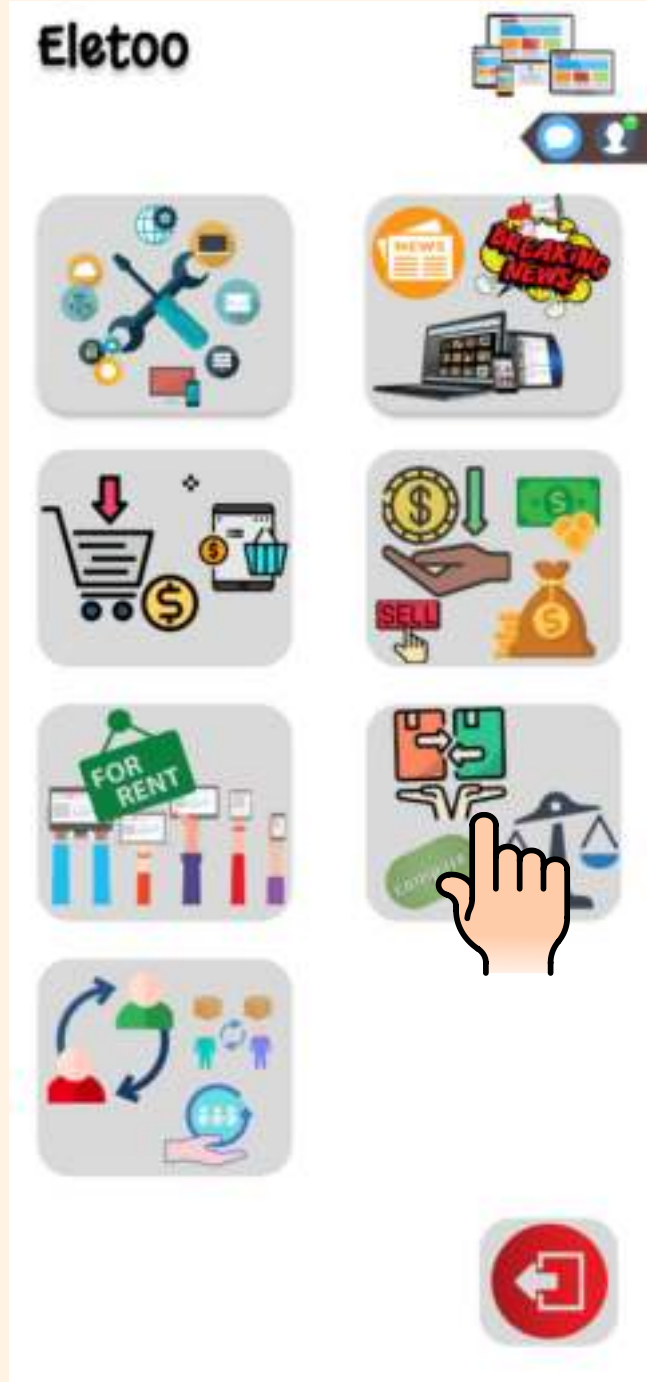
YOUR SELL REQUEST HAS BEEN PUBLISHED



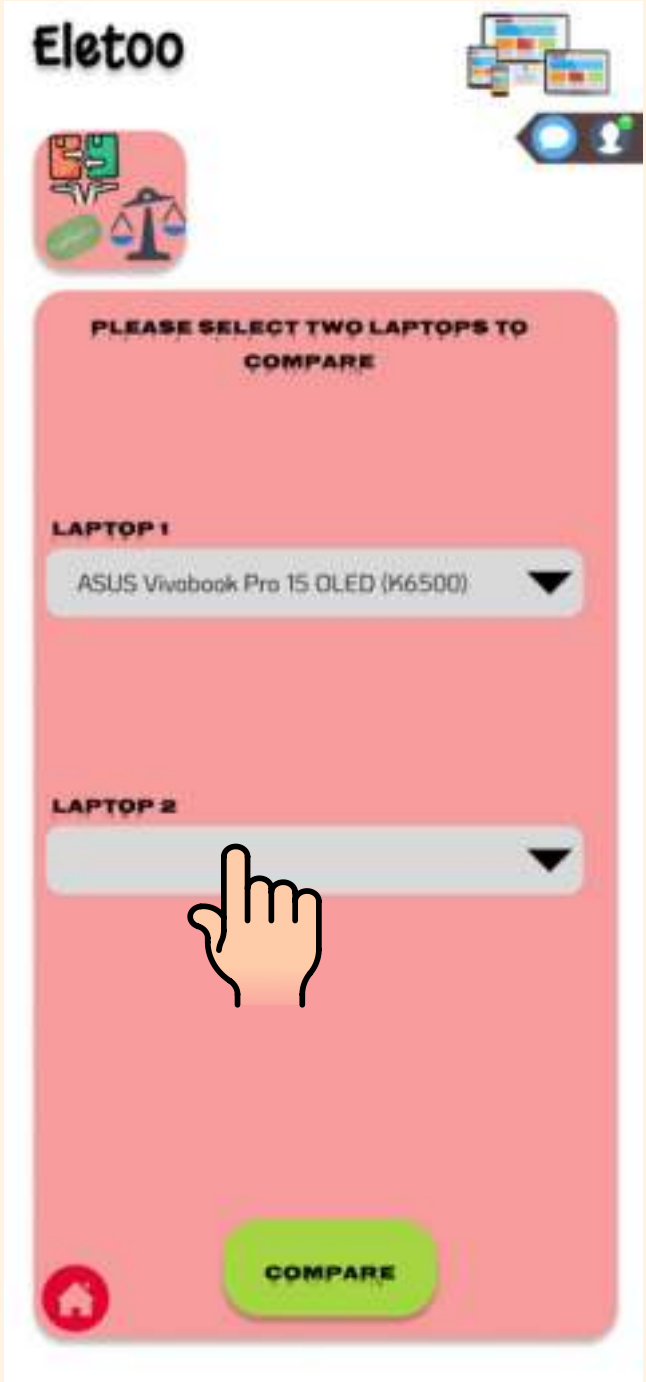
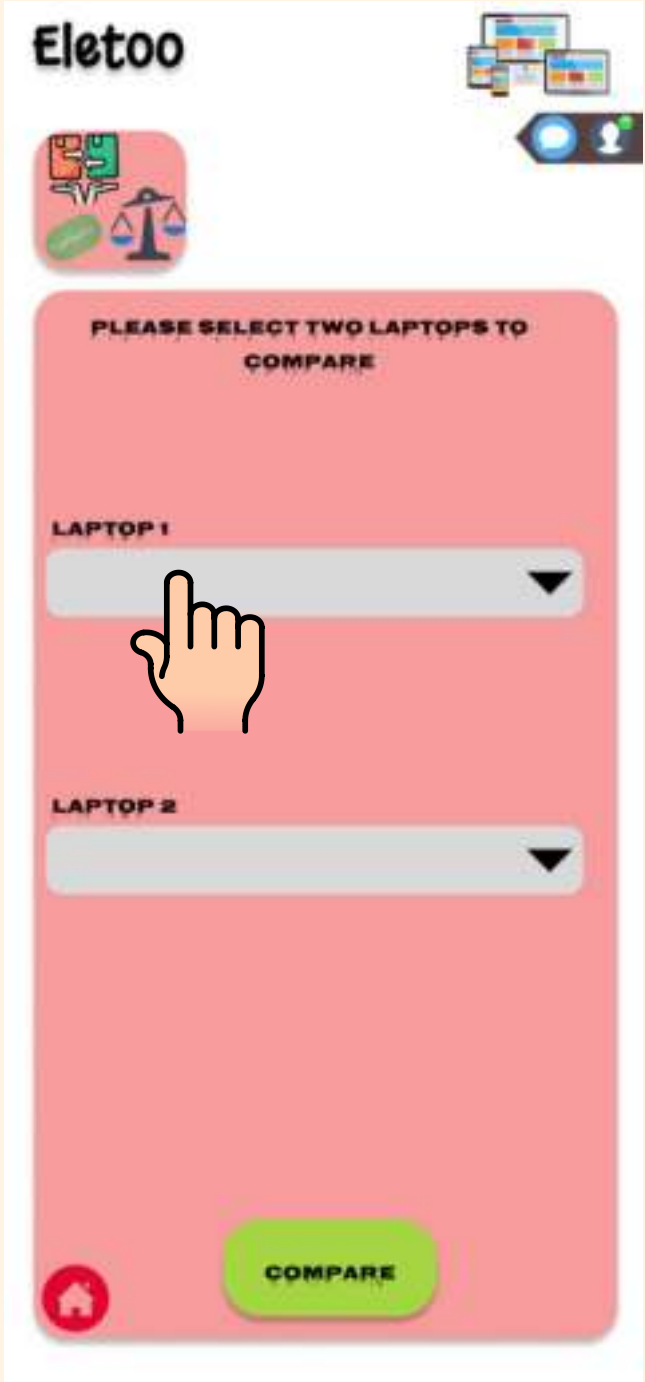
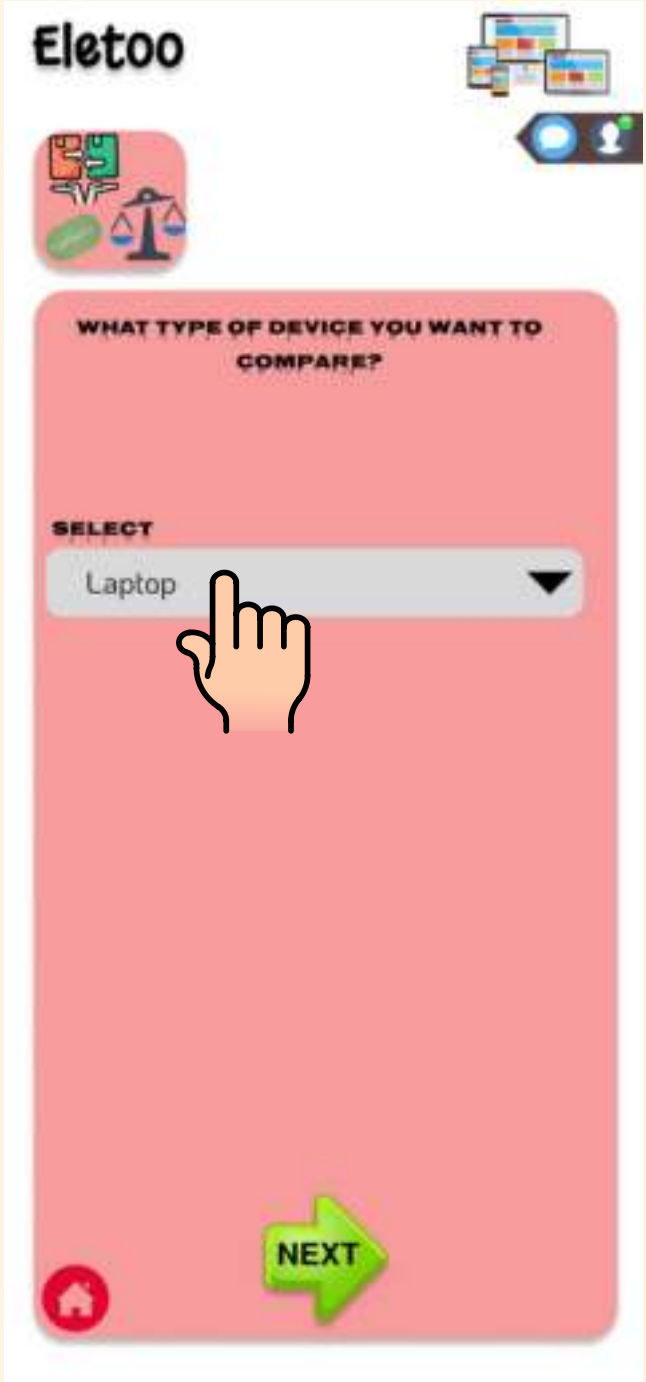
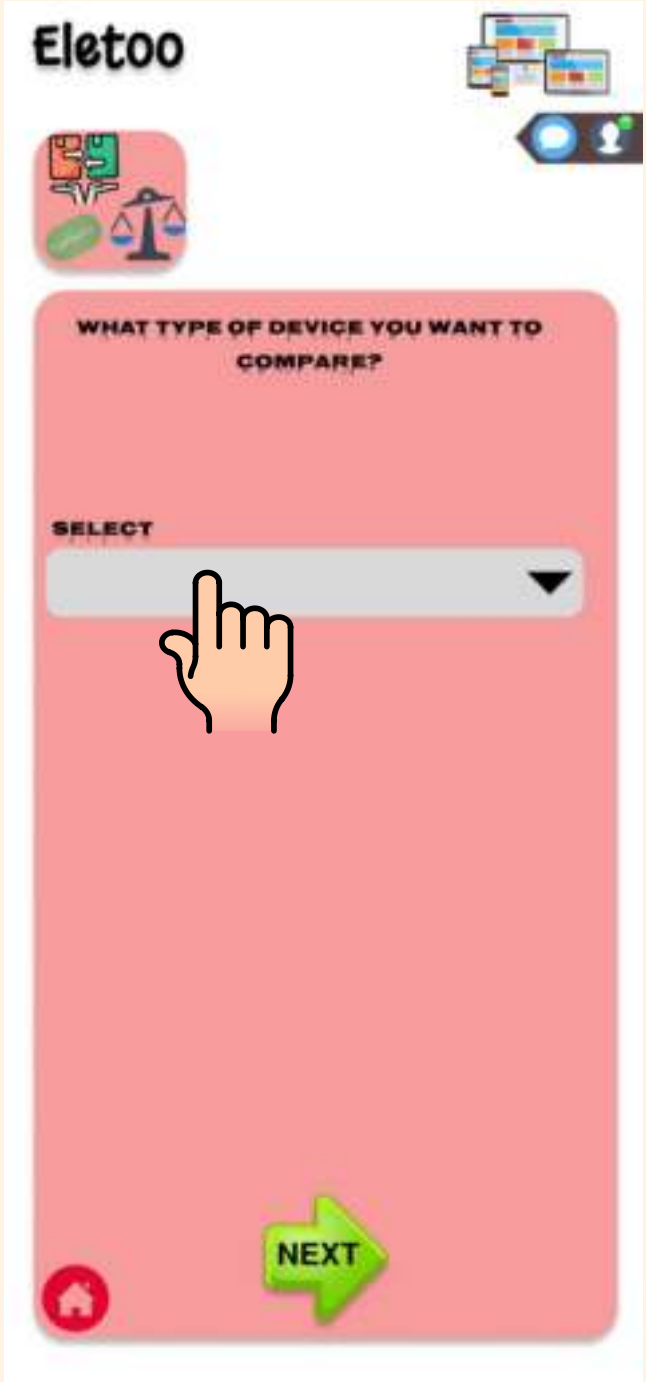
Hi-fi prototype
visual prototyping

Compare function

2

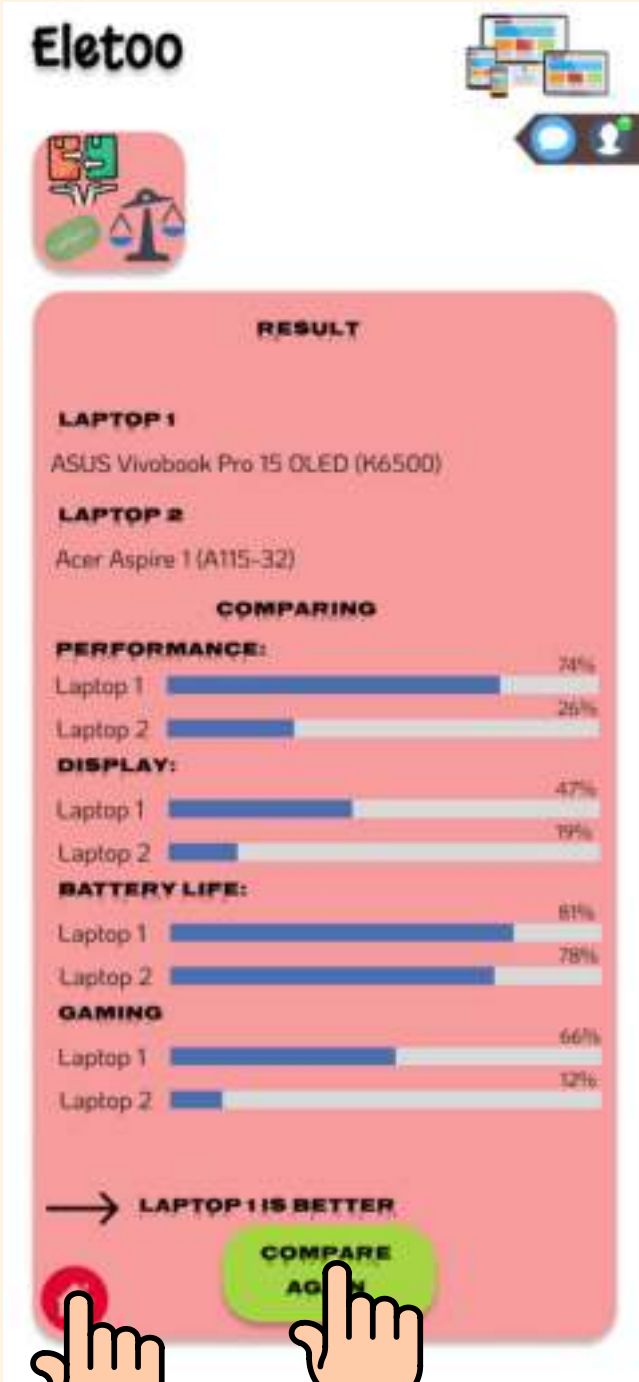


1



Hi-fi prototype
visual prototyping

Compare function



2

1

Hi-fi prototype
visual prototyping

Exchange function

1



1



1



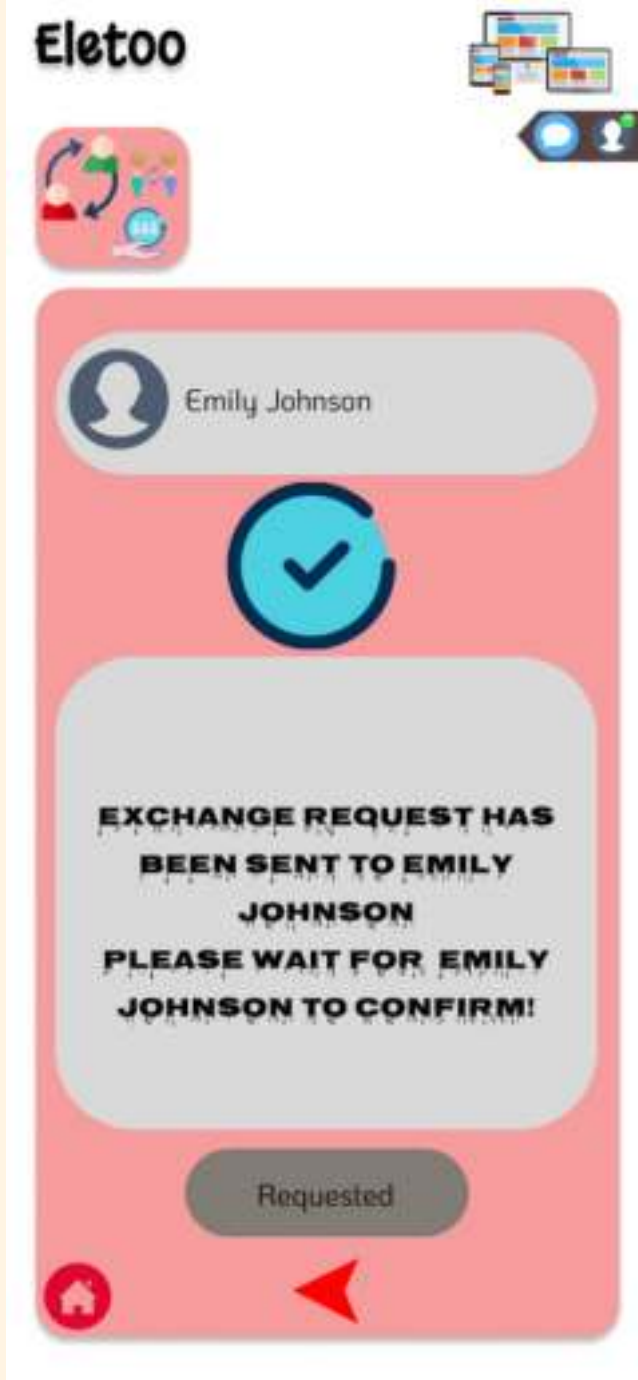
Hi-fi prototype
visual prototyping

Exchange function

1



1



Hi-fi prototype
visual prototyping

Exchange function

2

Eletoo

PLEASE FILL THIS REQUEST TO EXCHANGE YOUR DEVICE

SELECT DEVICE_TYPE

DEVICE_NAME

DEVICE_STATUS

UPLOAD PICTURE

YOUR DEVICE DESCRIPTION

TARGETED DEVICE

Request Exchange

2

Eletoo

PLEASE FILL THIS REQUEST TO EXCHANGE YOUR DEVICE

SELECT DEVICE_TYPE

Smartphone

DEVICE_NAME

Samsung Galaxy S21 Ultra

DEVICE_STATUS

Used

UPLOAD PICTURE

YOUR DEVICE DESCRIPTION

TARGETED DEVICE

Request Exchange

2

Eletoo

PLEASE FILL THIS REQUEST TO EXCHANGE YOUR DEVICE

SELECT DEVICE_TYPE

Smartphone

DEVICE_NAME

Samsung Galaxy S21 Ultra

DEVICE_STATUS

Used

UPLOAD PICTURE

YOUR DEVICE DESCRIPTION

TARGETED DEVICE

Request Exchange

2

Eletoo

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SELECT DEVICE_TYPE

Smartphone

DEVICE_NAME

Samsung Galaxy S21 Ultra

DEVICE_STATUS

Used

UPLOAD PICTURE

YOUR DEVICE DESCRIPTION

TARGETED DEVICE

Request Exchange

2

Eletoo

PLEASE FILL THIS REQUEST TO EXCHANGE YOUR DEVICE

SELECT DEVICE_TYPE

Smartphone

DEVICE_NAME

Samsung Galaxy S21 Ultra

DEVICE_STATUS

Used

UPLOAD PICTURE

YOUR DEVICE DESCRIPTION

TARGETED DEVICE

Request Exchange

Hi-fi prototype
visual prototyping

Exchange function

2

PLEASE FILL THIS REQUEST TO EXCHANGE YOUR DEVICE

SELECT DEVICE_TYPE

Smartphone

DEVICE_NAME

Samsung Galaxy S21 Ultra

DEVICE_STATUS

Used

UPLOAD PICTURE

image.png

YOUR DEVICE DESCRIPTION

• Manufacturer: Samsung

• Model number: SM-G998B2XGCUJ

• Processor: Samsung Exynos 2100

• Processor family: Samsung Exynos

• Processor clock speed: 2.9 GHz

• RAM: 12 GB

• Internal storage: 256 GB

• Display: 6.8" Dynamic AMOLED 2X

• Rear camera resolution: 108 MP

TARGETED DEVICE

Request Exchange

2

PLEASE FILL THIS REQUEST TO EXCHANGE YOUR DEVICE

SELECT DEVICE_TYPE

Smartphone

DEVICE_NAME

Samsung Galaxy S21 Ultra

DEVICE_STATUS

Used

UPLOAD PICTURE

image.png

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• Manufacturer: Samsung

• Model number: SM-G998B2XGCUJ

• Processor: Samsung Exynos 2100

• Processor family: Samsung Exynos

• Processor clock speed: 2.9 GHz

• RAM: 12 GB

• Internal storage: 256 GB

• Display: 6.8" Dynamic AMOLED 2X

• Rear camera resolution: 108 MP

TARGETED DEVICE

Wanting to exchange with Apple iPhone 13

• Manufacturer: Apple Computer

Request Exchange

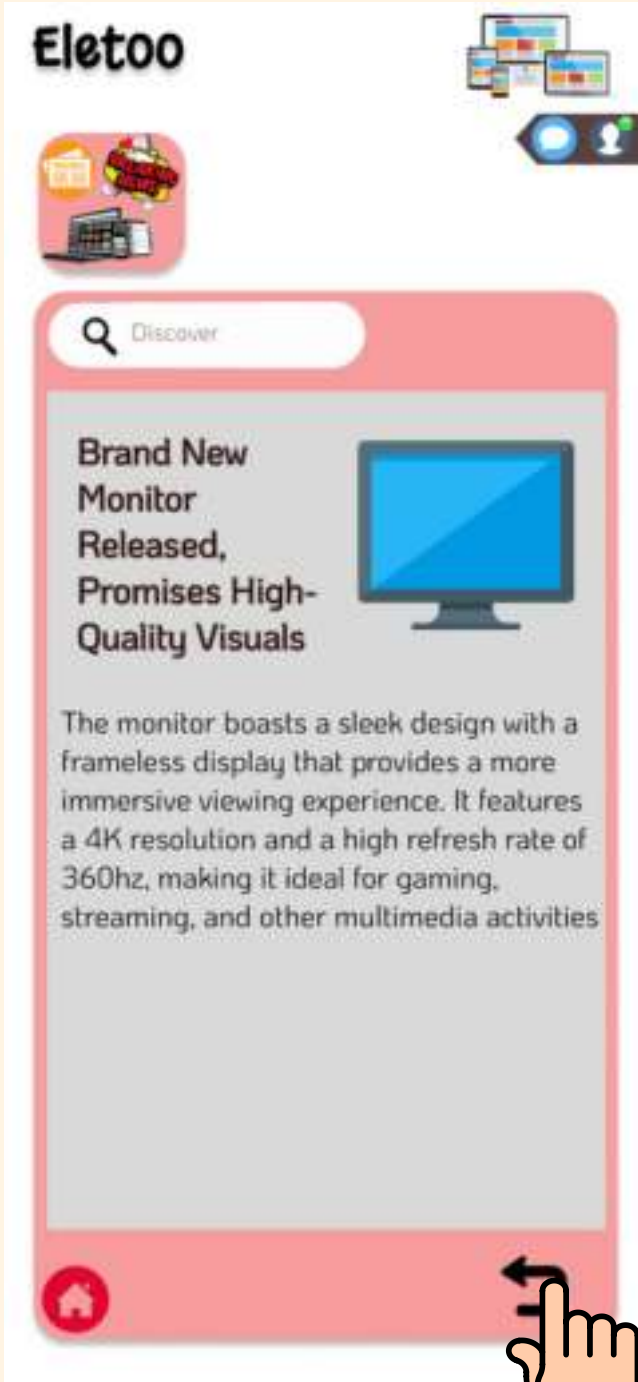
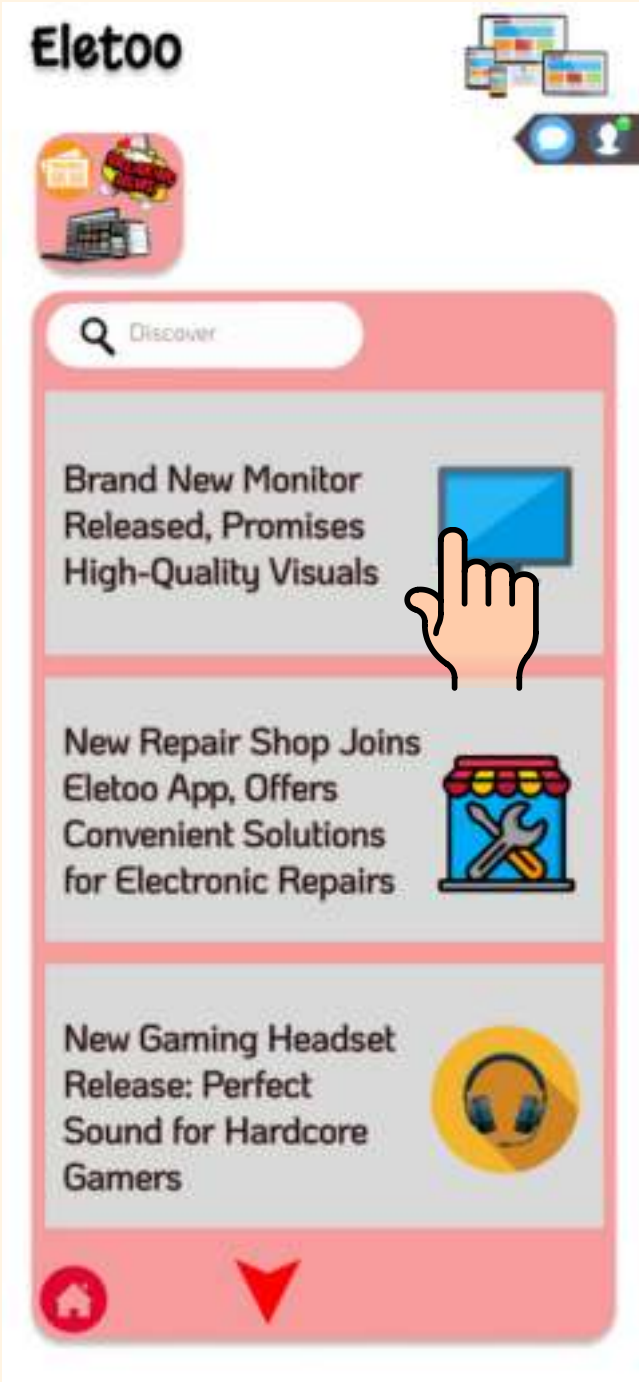
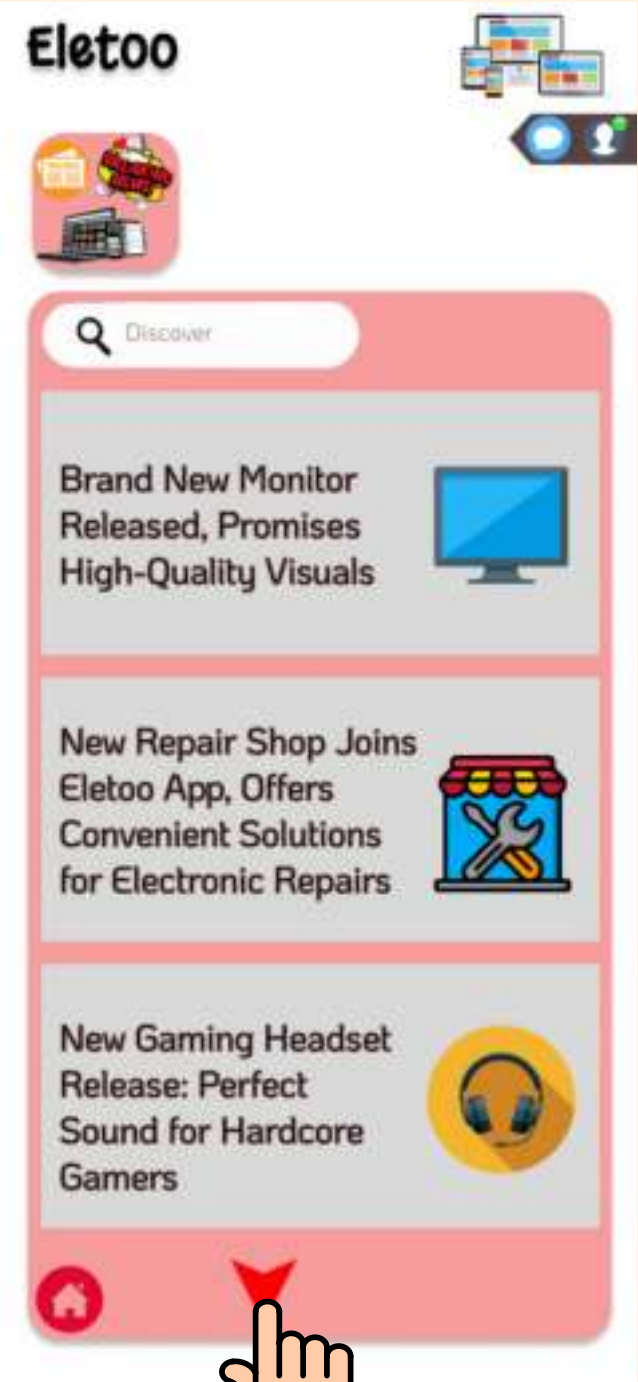
2

YOUR EXCHANGE REQUEST HAS BEEN PUBLISHED

Requested

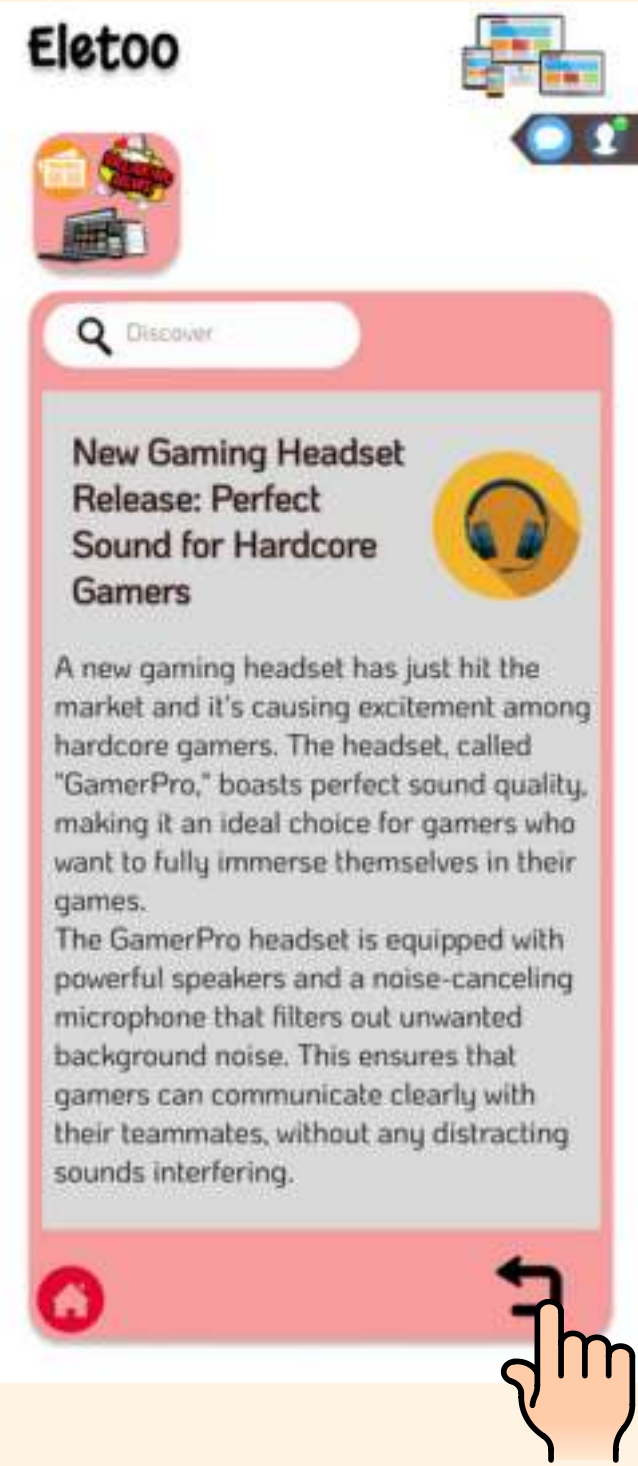
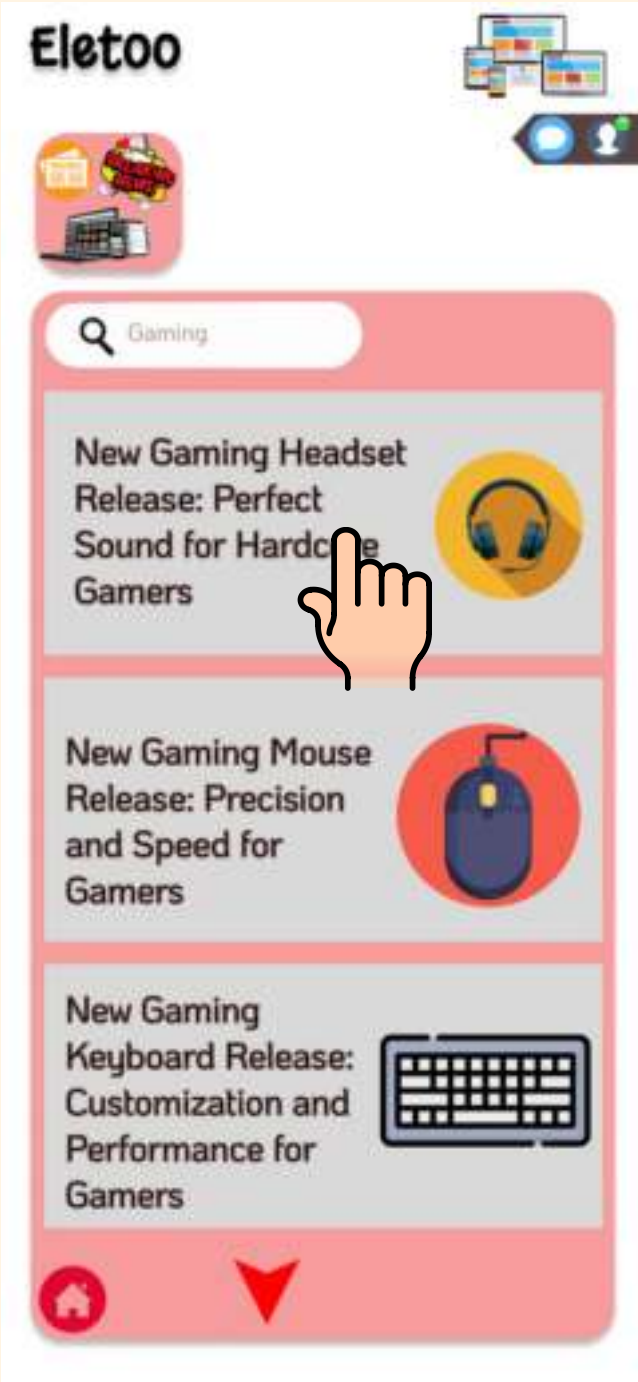
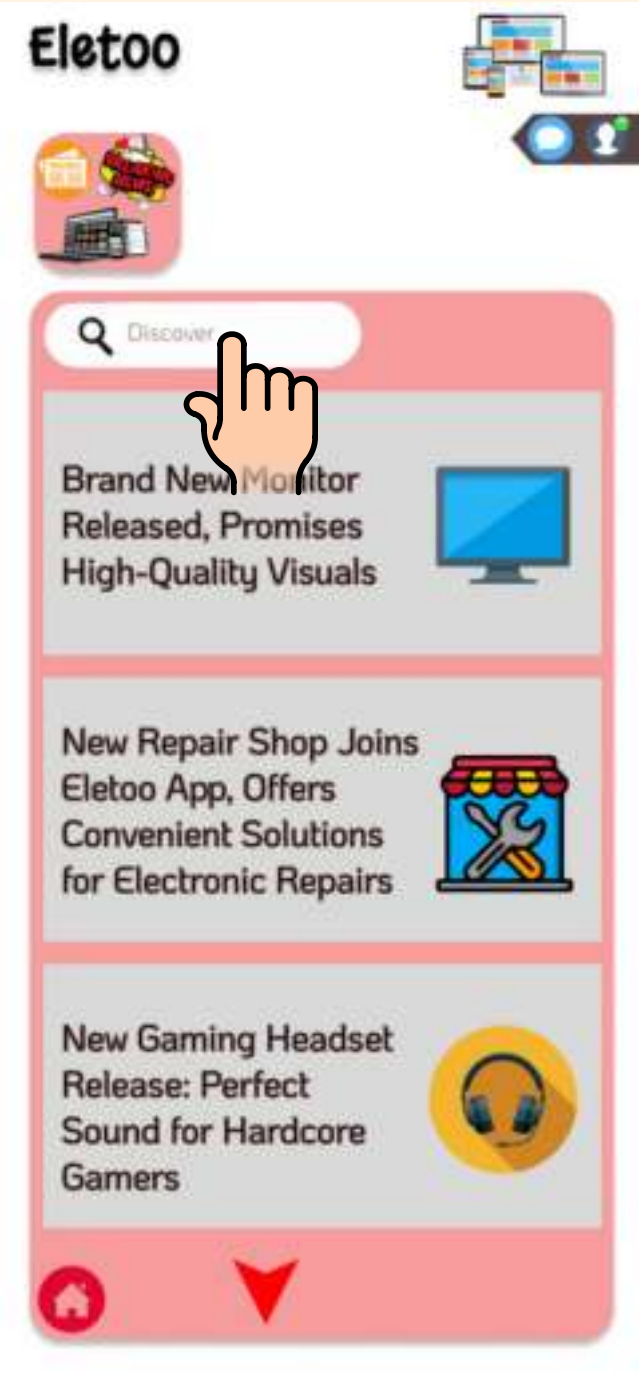
Hi-fi prototype
visual prototyping

News function



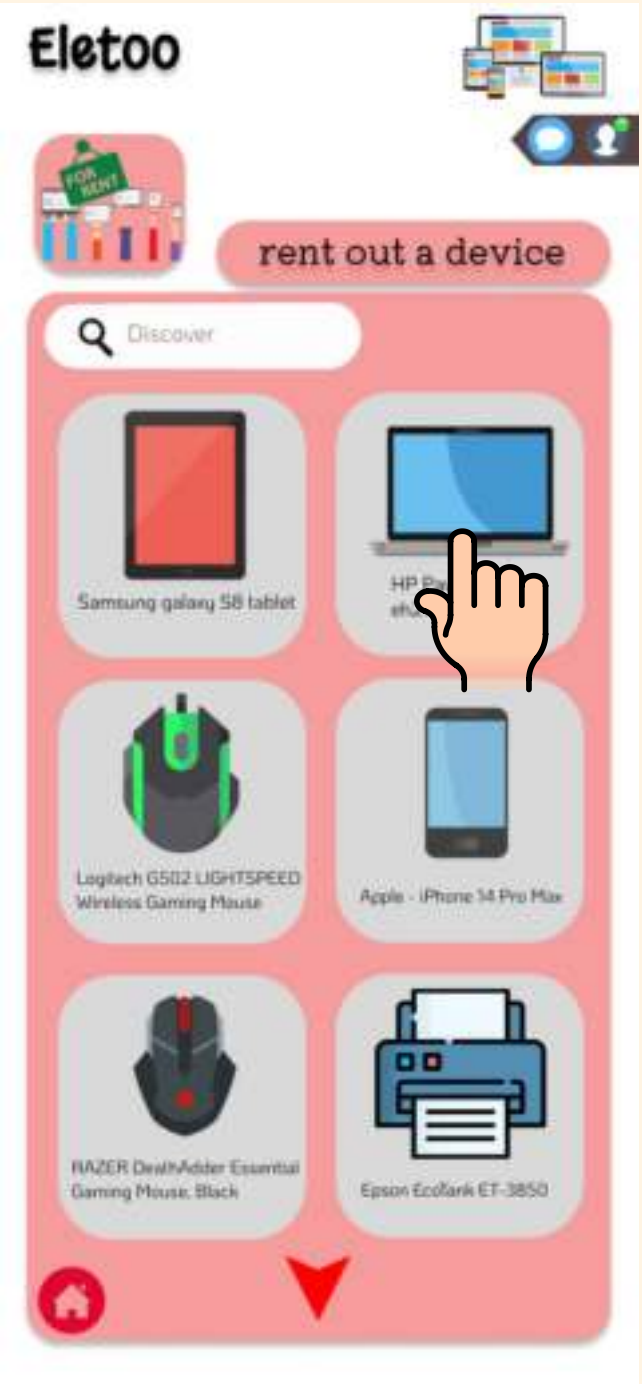
Hi-fi prototype
visual prototyping

News function



Hi-fi prototype
visual prototyping

rent function



Hi-fi prototype
visual prototyping

rent function



Hi-fi prototype
visual prototyping

rent function



Hi-fi prototype
visual prototyping

rent function

Eletoo

FOR RENT

rent a device

DEVICE_NAME

Crystal UHD 4K AU7179

DEVICE_TYPE

TV

DEVICE_STATUS

Used

PRICE PER MONTH

\$ 12.99

UPLOAD PICTURE

image.png

DEVICE DESCRIPTION

RENT

Eletoo

FOR RENT

rent a device

DEVICE_NAME

Crystal UHD 4K AU7179

DEVICE_TYPE

TV

DEVICE_STATUS

Used

PRICE PER MONTH

\$ 12.99

UPLOAD PICTURE

image.png

DEVICE DESCRIPTION

Screen Size: 55 inches
Brand: Samsung
Supported Internet services: WLAN, LAN
Display technology: UHD
Product dimensions: 18.5D x 73.2W x 47.9H centimetres
Resolution: 4K Refresh rate: 60 Hz
Special feature: Smart / Internet
Model name: GU55AU7179UX2G
Included components: GU55AU7179UX2G

RENT

Eletoo

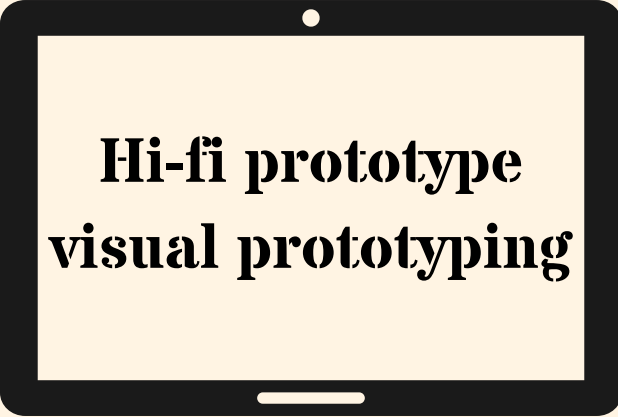
FOR RENT

rent a device

Your device with following details is now visible to all users.

Device name : Crystal UHD 4K AU7179
Device type : TV
Device status: Used
Price per month : \$ 12.99

Device description :
Screen Size: 55 inches
Brand: Samsung
Supported Internet services: WLAN, LAN
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Resolution: 4K Refresh rate: 60 Hz
Special feature: Smart / Internet
Model name: GU55AU7179UX2G
Included components: GU55AU7179UX2G



link to figma :

<https://www.figma.com/file/QRTe0SBSsLRmCcRn5MbpJK/Untitled?node-id=30%3A4&t=dLMvEZeaCuxlOvtB-1>

