

SEN4105

GROUP PROJECT ASSESSMENT

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Group 3

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1. Interviews

First of all, the questions we will ask students are as follows:

Demographic questions:

1. Could you please share your name?
2. What is your age?
3. What is your gender?
4. What is your major?

Experience questions:

5. Have you ever utilized a second-hand trading app before?
6. If yes, which app(s) have you used? What would your evaluation be in an overall encounter with them? (1 being the worst and 10 being the best)
7. What did you like the most about the app(s) you've used?
8. What did you dislike or what difficulties did you experience while using the app(s)?
9. What would you like to see in a new second hand buy & sell app?
10. If you haven't used such an app before, would you consider trying one? Why or why not?
11. (If they haven't used such an app before, we show them an existing recycling app)
Based on this app we've shown, what features do you find most captivating?
12. What features do you think could be upgraded?
13. How important is the rating/evaluation system for you while making a purchase choice?

Here are the answers we got from the interviews:

Interview 1:

1. Sinem
2. 23
3. Female
4. Medical School
5. Yes
6. I used the Dolap application, I give this app 6 points.
7. App is user friendly, I can easily buy the product I want
8. Customer service was difficult to reach
9. I want to alert by app when my favorite items' price were decrease.
10. N/A
11. N/A
12. I want to talk with customers consultant easily because there is no commercial without mistake and they can solve our problems easily.
13. It effect me when I was buy something from app.

Interview 2:

1. Ayşe Özer
2. 23
3. Female
4. Human Resources
5. Yes.
6. I have used Sahibinden. And my overall encounter 7
7. Actually, Sahibinden is most popular second-hand app in turkey, I like Sahibinden because There is a lot of seller and I can find what I want to buy easily. And I can compare a lot items and I can buy which one is cheaper.
8. Sahibinden is user friendly mobile application but its filter part is the hardest part of app. For this reason I cant eleminate the items.
9. If the products I added to my favorite are discounted, I should see them on the screen.
10. N/A
11. N/A.
12. I can leave a voice message in the messaging section and I would like to make a call.
13. I think it is so important for the people because we can understand seller that sell items unqualified and today's world there is a lot of robbery news, in this manner We can prevent people from being scammed.

Interview 3:

1. Enes
2. 21
3. Male
4. Computer Eng. (2nd class)
5. Yes
6. Dolap,8
7. We can negotiate with the seller ourselves, this is very nice.
8. When I meet with the sellers in the closet, they meet for different purposes, not to sell products.
9. I used it before.
10. The Dolap images are very clear, I do not respect the non-visual, and the seller is also rated, this feature has a positive effect on my shopping.
11. I used it before
12. There should be a comment section in the Dolap application.
13. I didn't have anything to do with the payment because I usually meet with the vendors and buy from seller.

Interview 4:

1. Sude
2. 22
3. Female
4. Mathematic (3rd class)
5. Yes
6. Sahibinden,5
7. Receive notifications about price changes of categories and favorite products
8. There are too many scammers. I want to buy a house and it is written from the owner in the ad, but real estate agents come up to me, so they do not reduce the price enough.
9. There is no measure against the insufficient services and exorbitant prices from the owner.
10. I used it
11. I used it
12. The fact that the background is always yellow is tiring on the eyes, and colors that do not strain the eyes should be used.
13. Payment systems are fine, I didn't have any problems.

Interview 5:

1. Halil Ayyıldız
2. 19
3. Male
4. Computer Engineering
5. Yes
6. 8
7. I like the most about the I've used Application is I can follow the products I like easily.
8. This application is not user friendly design sometimes I cant find product I want to buy and I spend a time to find true item.
9. User-Friendly design is most important to users in this way they can reach a lot customers.
10. N/A
11. N/A
12. Its can be better design and better infrastructure system
13. It is important but nowadays most sellers buy bot account to make a comment and rate to its product so I can not believe it.

Interview 6:

1. My name is Ekrem.
2. 24.
3. Male.
4. I am an architect.
5. Yes.
6. I used letgo before and, i can give a 6 points to letgo app.
7. I can easily find second hand products for most of the products I want.
8. Sometimes I come across unnecessary listings because some sellers fail to update or remove their products.
9. I would like to see a user-friendly interface with easy communication features in a new second-hand buy and sell app.
10. I used
11. N/A
12. Maybe Developer can make better page that user friendly screen because I am growing up with technology but some people suffer from mobile application which is hardly design
13. How important is the rating/evaluation system for you while making a purchase choice? Off course it is so important to buy something. People comments are the best way to find true products.

Interview 7:

1. Furkan
2. 23
3. Male
4. Management Engineering
5. No.
6. I have not used second-hand trading app.
7. I have not used but if I used mobile app I would prefer user friendly app.
8. I don't know but I heard from my friends they are a lot of robber on the Internet World so I prefer which one is reliable.
9. It can be more policy when the add products to mobile app.
10. Off course, yes I have to be modern people and caught to today's world.
11. Message part is so good and filter is easy.
12. Brand part is so small and I can not see all brand faster.
13. It is so important for everyone.

Interview 8:

1. My name is Aykut.
2. I am 21 years old.
3. Male.
4. I am majoring in Computer Science
5. Yes, I have utilized a second-hand trading app before.
6. I have used a few different apps, including LetGo and Facebook Marketplace. Overall, I would rate my experience as a 7.5 out of 10.
7. What I liked the most about these apps was the wide variety of items available for sale. It was convenient to browse through different categories and find what I needed.
8. One difficulty I experienced was dealing with unreliable sellers. Sometimes, sellers would not respond to inquiries or would cancel meetings at the last minute, which was frustrating.
9. In a new second-hand buy and sell app, I would like to see improved safety measures, such as verified user profiles and secure payment options. Additionally, a more user-friendly interface and better search filters would be helpful.
10. If I hadn't used such an app before, I would definitely consider trying one. The convenience of finding affordable second-hand items and the potential for selling my own unused belongings make it an appealing option.
11. Looking at this existing recycling app, I find the feature of connecting buyers and sellers based on location very captivating. It makes it easier to arrange meetings and reduces the hassle of long-distance transactions.
12. One feature that could be upgraded is the messaging system. It would be helpful to have a more organized and user-friendly messaging interface, allowing users to easily track their conversations and negotiate prices.
13. The rating/evaluation system is quite important to me while making a purchase choice. It provides insight into the reputation and reliability of the seller. I would be more inclined to purchase from sellers with positive ratings and reviews, as it gives me confidence in the transaction.

Interview 9:

1. Dolunay.
2. I am 25 years old.
3. Female.
4. I am majoring in Business Administration.
5. Yes, I have utilized a second-hand trading app before.
6. I have used the app called "Depop" and I would rate my overall experience as an 8.
7. What I liked the most about Depop was the community aspect. It felt more personalized and engaging compared to other platforms. I enjoyed following specific sellers and discovering unique items.
8. One difficulty I experienced while using Depop was the lack of filtering options. It sometimes made it challenging to narrow down the search results based on specific criteria, such as size or color.
9. In a new second-hand buy and sell app, I would like to see a more robust seller verification process. It would provide an added layer of trust and ensure that the sellers are genuine. Additionally, improved shipping options and cost transparency would be beneficial.
10. Yes, I would consider trying a new second-hand buy and sell app. I enjoy finding unique items at affordable prices, and using such an app would give me access to a wider range of sellers and products.
11. Looking at this existing recycling app, I find the feature of in-app payment and secure transactions most captivating. It adds a level of convenience and security, especially when dealing with unknown sellers.
12. One feature that could be upgraded is the search functionality. It would be helpful to have more advanced filters, such as sorting by location, price range, and condition of the items.
13. The rating/evaluation system holds significant importance for me while making a purchase choice. It helps me assess the reliability and trustworthiness of the sellers. I am more likely to make a purchase from sellers with positive ratings and reviews, as it indicates their past performance and customer satisfaction.

Interview 10:

1. Melih Soykan
2. 21
3. Male
4. English Teacher Student
5. Yes, I tried.
6. 3
7. Products was cheap I did not to mobile app.
8. All UI/UX part is so bad I could not find anything for example I am adding to cart to my bag but I could not where is bag this is not acceptable.
9. I want to see Very easiy design just I will enter to app and buy something.
10. N/A
11. N/A
12. Location-based design can be better
13. It not important for me because Some user make a comment to give harm to seller.

2. Persona

We create 1 persona that can be used in our user-centered design process. And we describe 1 goal that could be satisfied by your interactive system prototype.

Name: Selin Aydin

Age: 22

Location: Istanbul

Gender: Female

Occupation: Human Resource Management student

Background: Selin is a third-year student studying human resource management. She lives in a small apartment in the city and enjoys shopping for used items on various second-hand trading apps. She is tech-savvy and is always looking for ways to save money and find unique items. She likes to compare prices and looks for the best deals.

Needs and Goals: Selin wants to have a smooth, seamless experience when using a second-hand trading app. She wants an app that is user-friendly, easy to navigate, and has a reliable rating/evaluation system. She would also appreciate a better filter system and would love to receive notifications when products she's added to her favorites are discounted. She's also looking for improved communication features like voice messaging and calling.

Frustrations: She finds dealing with unreliable sellers frustrating. She also gets annoyed when the filters in apps are not user-friendly, making it hard for her to eliminate items. She also has concerns about scams and would like better security measures in place.

Goal Satisfied by the Interactive System Prototype: A major goal for Selin that could be satisfied by the prototype would be having an efficient, user-friendly second-hand trading app with a reliable rating/evaluation system, efficient filters, and improved communication options. The system should also have measures to notify her about price changes for her favorite products. This would offer her a trustworthy and convenient platform for her second-hand shopping activities.

3. Problem (as-is) scenario

This problem scenario describes our current user practice in relation to the Design Problem.

Selin, a third-year Human Resource Management student, enjoys shopping on various second-hand trading apps. On a typical evening, she finds a designer handbag on a second-hand app that she has been wanting for some time. Excited by the find, she considers buying it.

Before proceeding, Selin decides to check the seller's rating and reviews to ensure the purchase is a good decision. However, she faces a hurdle immediately - the app's rating system is confusing and not very informative. The ratings are just numbers with no accompanying reviews or detailed feedback from other buyers. She can't understand what the rating signifies or how reliable the seller is.

On top of that, the app's messaging system and filter functionality are not user-friendly. She struggles to contact the seller and to differentiate between identical listings of the same item. This adds to her uncertainty about the seller and the quality of the product.

Finally, when Selin receives a response from the seller, it is a voice message with poor audio quality, making it hard to understand. To add to her frustration, she doesn't receive any notification about a discount on the handbag that she had added to her favorites.

Selin's shopping experience is hindered by the current design problems of the app, such as the poor communication system, inadequate filter functions, lack of detailed rating/evaluation system, and absence of discount notifications. These issues deter her from making a confident purchase and make her second-hand shopping experience inconvenient and untrustworthy. She wishes for an app that offers her a reliable, seamless, and informative shopping experience.

4. Activity (to-be) scenario

This activity scenario describes our current user practice in relation to the Design Problem.

Selin, a resourceful third-year Human Resource Management student, is browsing her favorite second-hand trading app for unique finds. One day, she stumbles upon a designer handbag she's been longing for. Excited by her discovery, she considers buying it.

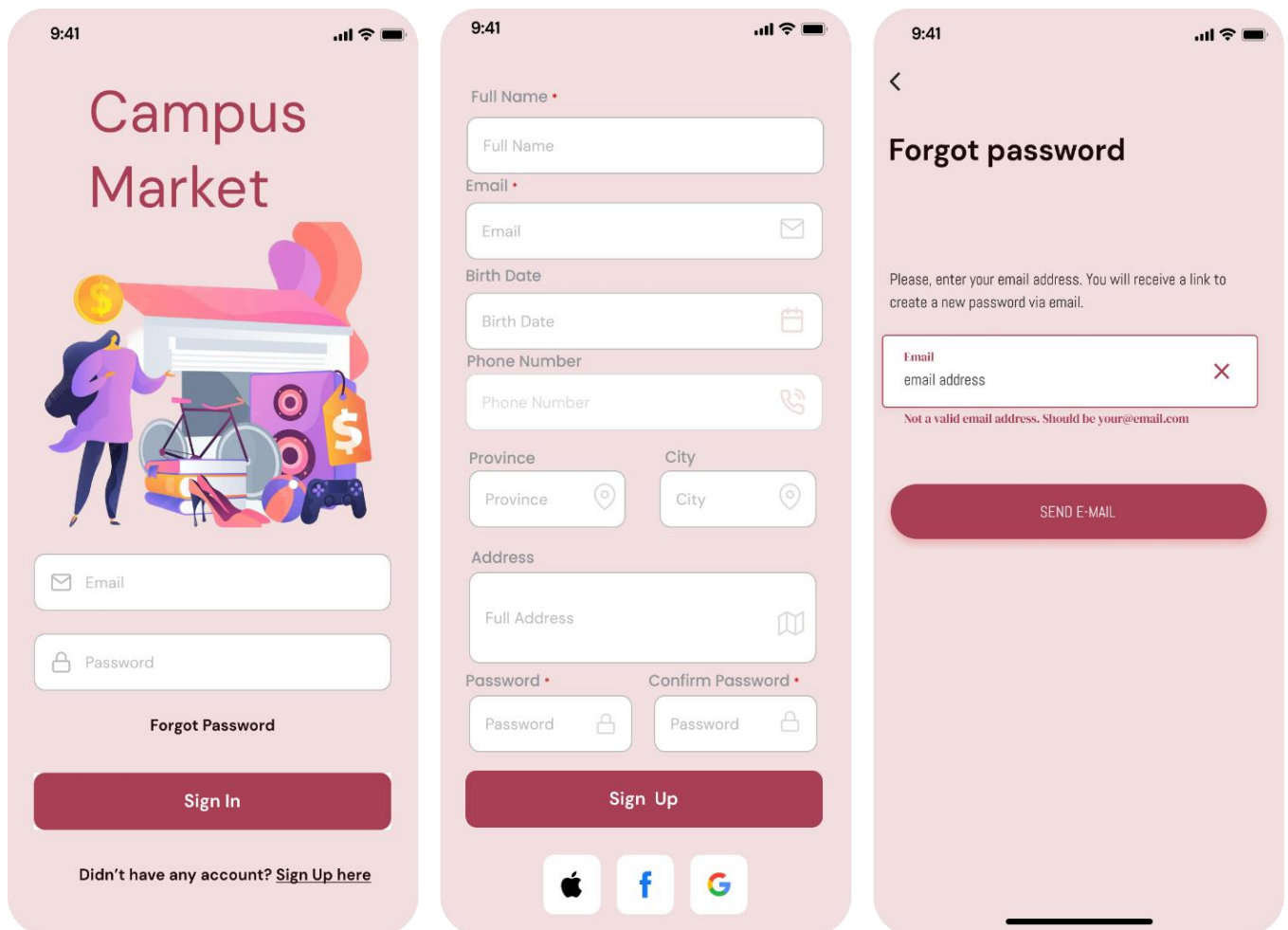
Before she makes a decision, she decides to check the seller's rating and reviews, a practice she always follows before making a purchase. The newly improved app now has a detailed rating and review system for each seller. She can see not just numerical ratings, but also read experiences and feedback from previous buyers. This gives her a comprehensive understanding of the seller's reliability and product quality.

Encouraged by the positive reviews and high rating, she decides to contact the seller. She is pleased to find that the messaging system is user-friendly and efficient, allowing her to send a voice message to ask for more details. The seller responds promptly with a clear voice message detailing the condition of the handbag.

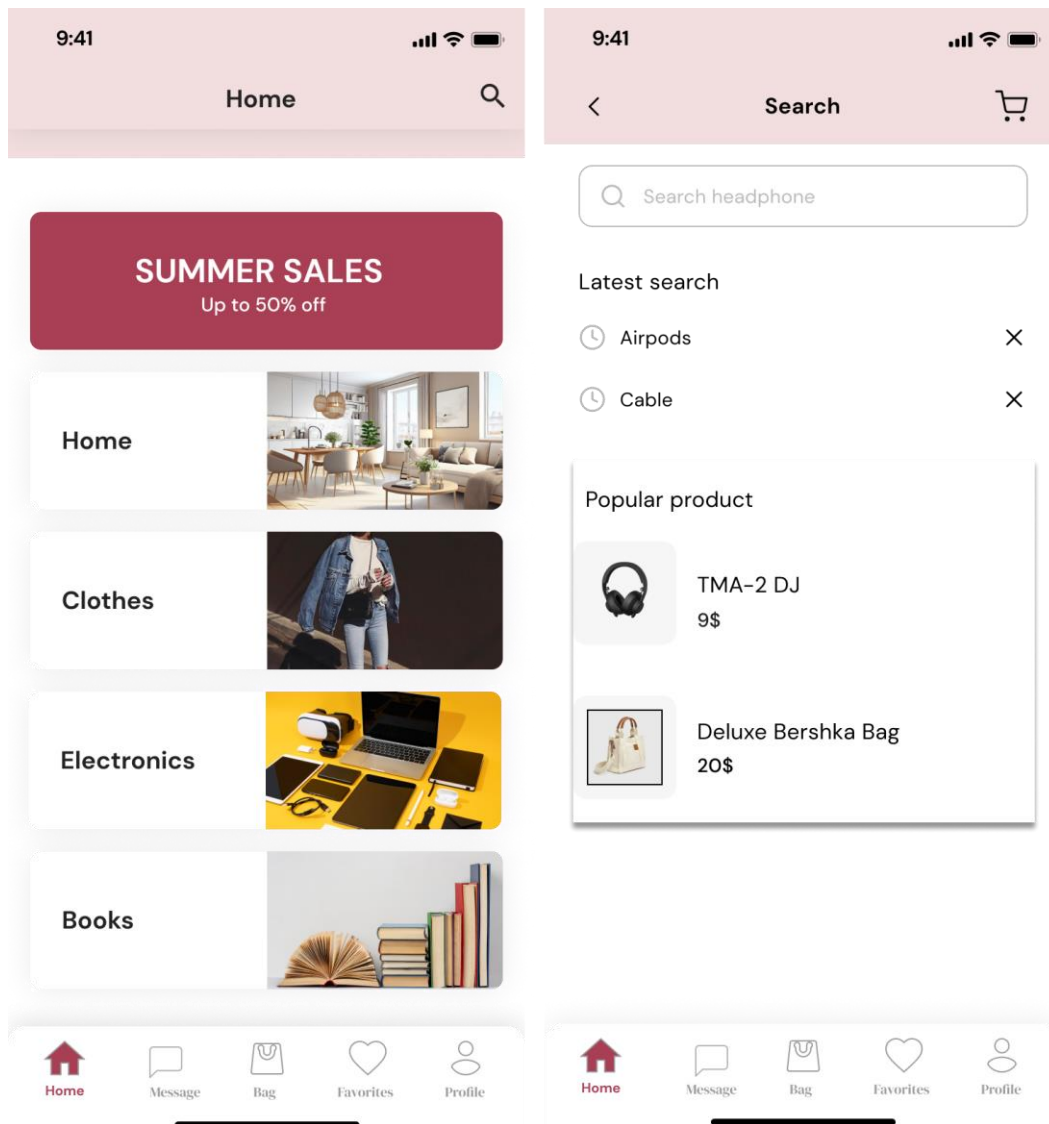
The app's improved filter system helps her easily distinguish between identical listings and focus on the item she is interested in. Additionally, she is pleasantly surprised when she receives a notification about a discount on the handbag she had added to her favorites, courtesy of the new notification features the app has introduced.

In this new scenario, Selin has a seamless, enjoyable shopping experience on the second-hand trading app. The comprehensive rating system, improved communication system, advanced filters, and timely notifications all contribute to a satisfying shopping experience. The app not only meets her needs but also instills confidence and trust in her purchases, making her second-hand shopping experiences a true delight.

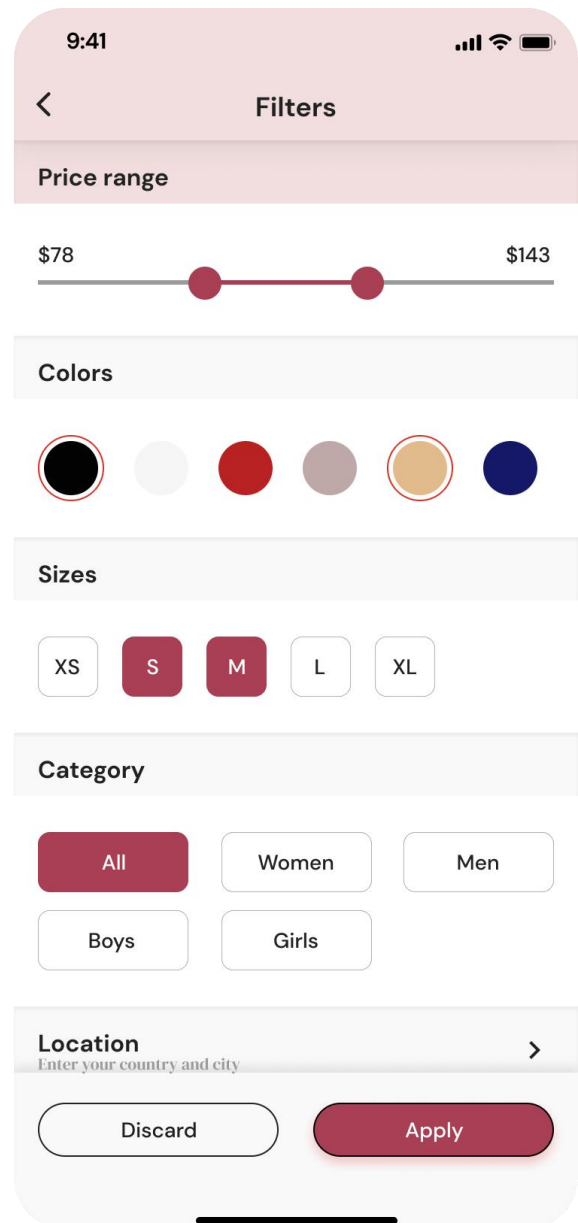
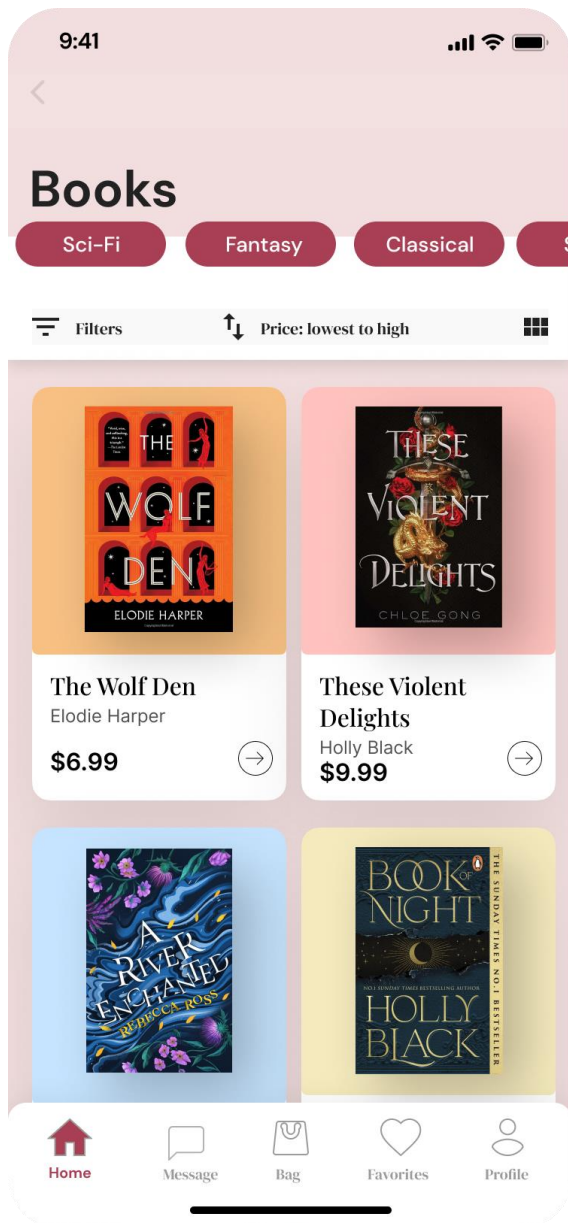
5. Digital Prototype



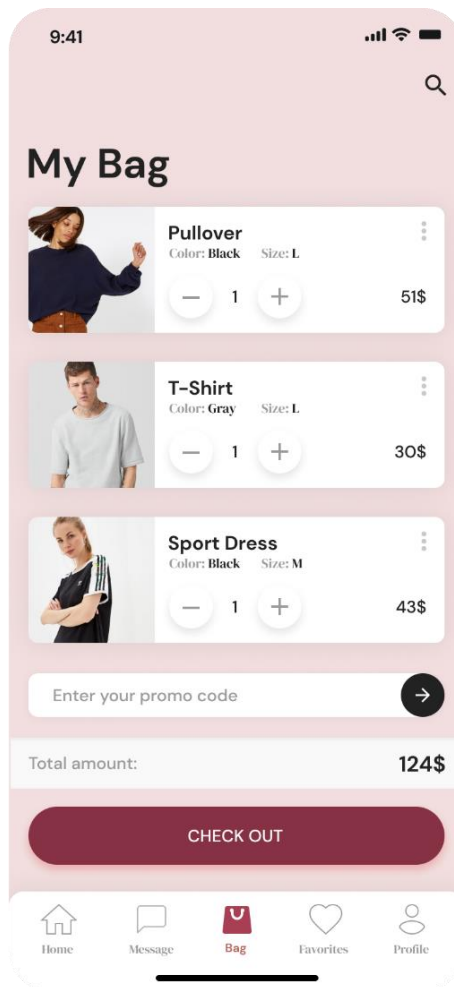
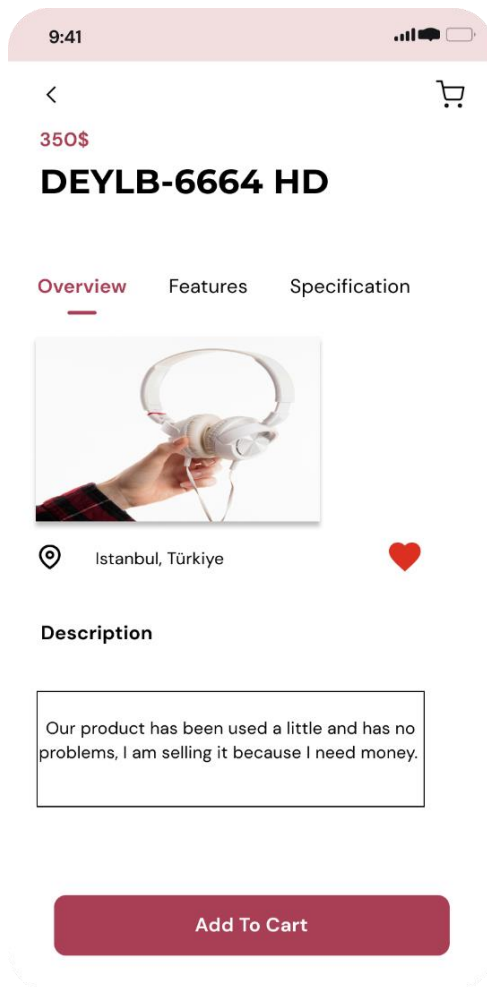
Let's start by introducing our app design. These screens are respectively our login screen, register screen and forgot password screen. As Petrie and Power pointed out, we made the text and interactive buttons big and clear enough. We have also arranged our page layout in an easily readable and clean way. When creating a new membership, we place a red asterisk next to the required fields this making it easier for users to understand what our system wants in accordance with the Nielsen heuristic. In the forgot password screen, the error indicates a nonvalid email address. Avoiding a problem from happening in the first place is more important as cautious design is too, than good error messages. We also expressed the error message as plain as possible.



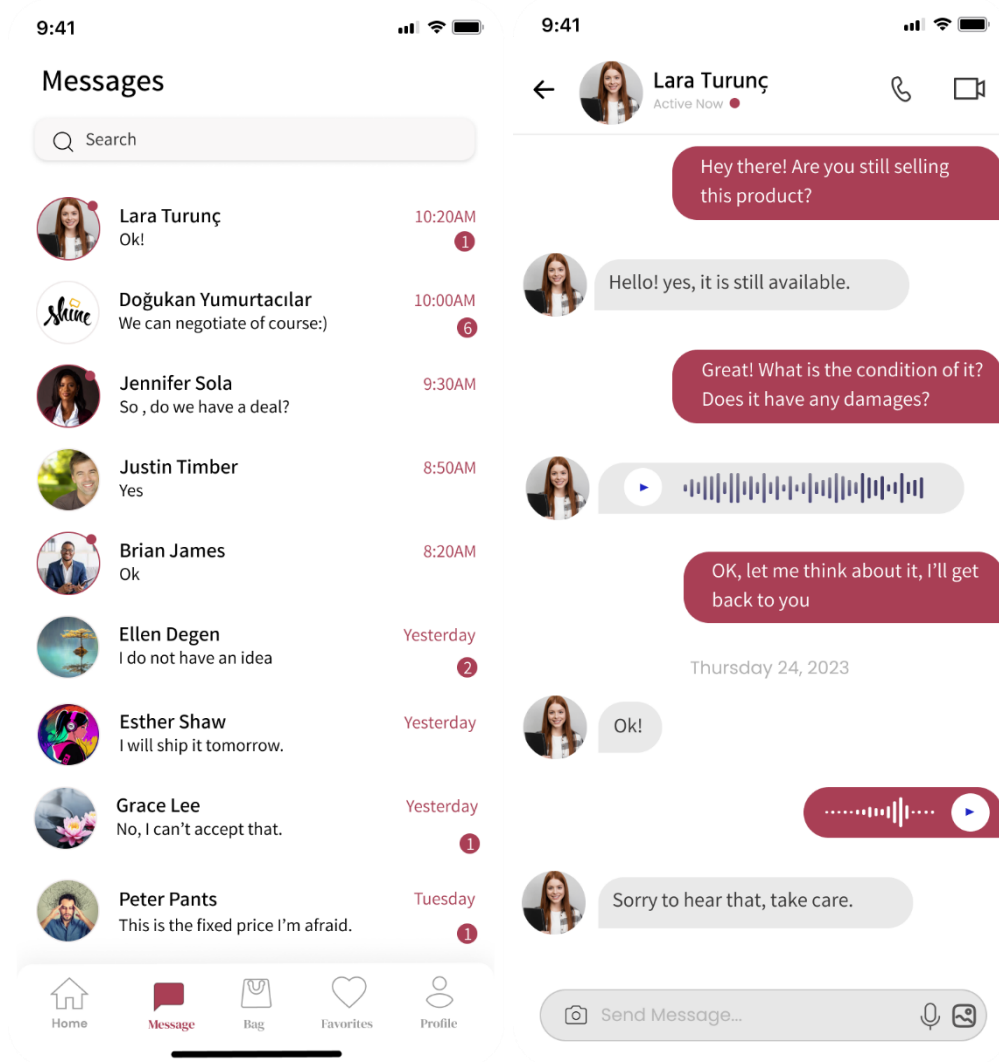
These are the home page and search page. According to the needs of our persona we made the app easy to navigate. Also, the persona can find the specific categories in the most convenient way possible. While determining the category names, we take into consideration Nielsen heuristic's thus the category words are from the daily life so that users can understand easily. Providing access to the searches recently viewed in the near past can help users resume shopping that they left incomplete and that may have a hard time recalling. Lastly, our persona can look at the popular items page to easily find the bag they've been in search of for a long time.



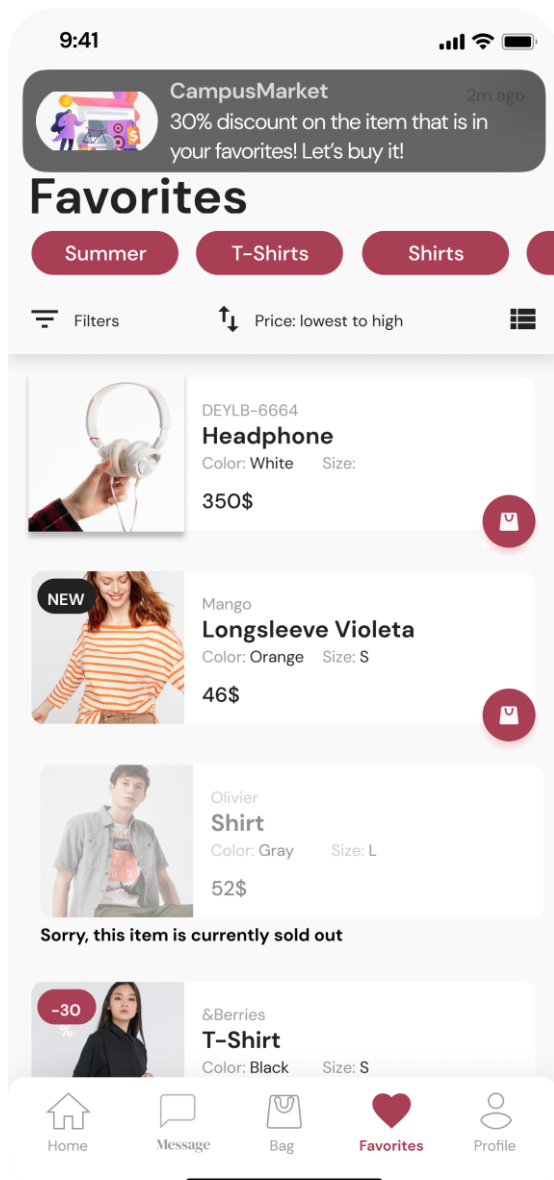
The persona selects the books category and then all the available books are displayed. Thanks to our advanced filters feature, the persona can find and compare the prices and deals. She can also specify her location so that she can see the available products near her. From the Nielsen's heuristics we used the visibility of system status so that when the user utilizes the filters feature the selected options are colored differently so the user can see which filters they have selected.



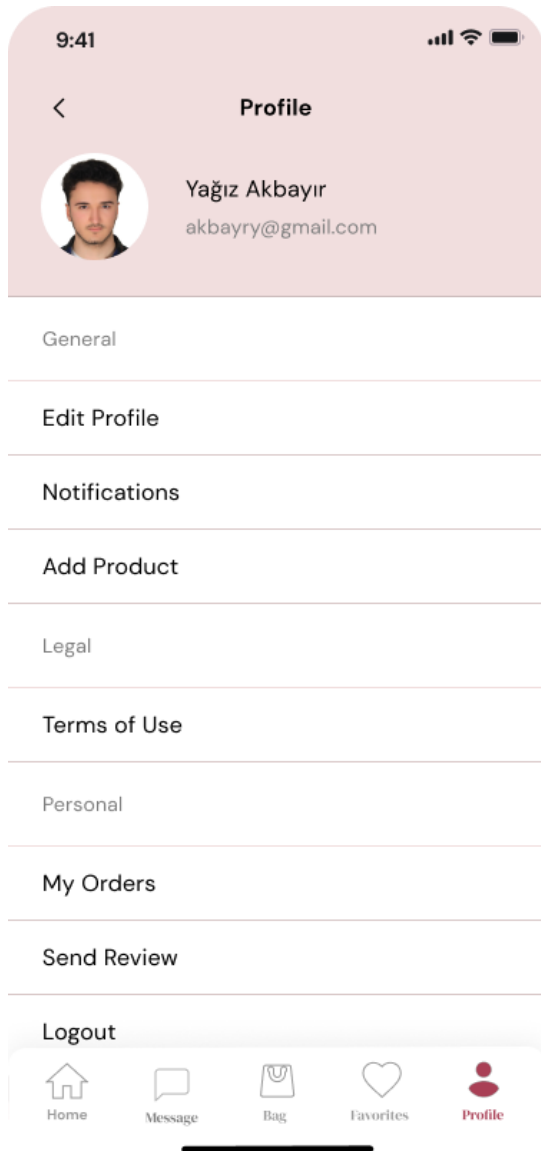
Users can see the detailed description and features of the product as well as product's location by clicking on it allowing them to choose the product that is more suitable for their location. After clicking add to Cart button the products are added to the bag tab, where the desired items are listed. If there are any unwanted or incorrectly added items, users can edit, make changes, or delete them. Finally, they can proceed to check out to complete the purchase. On the bag page, users first check the products they have added to their carts, and after seeing the total amount, they click the checkout button and proceed the payment screen. The checkout button is intentionally put at the bottom of the screen because it is the most logical interaction for users.



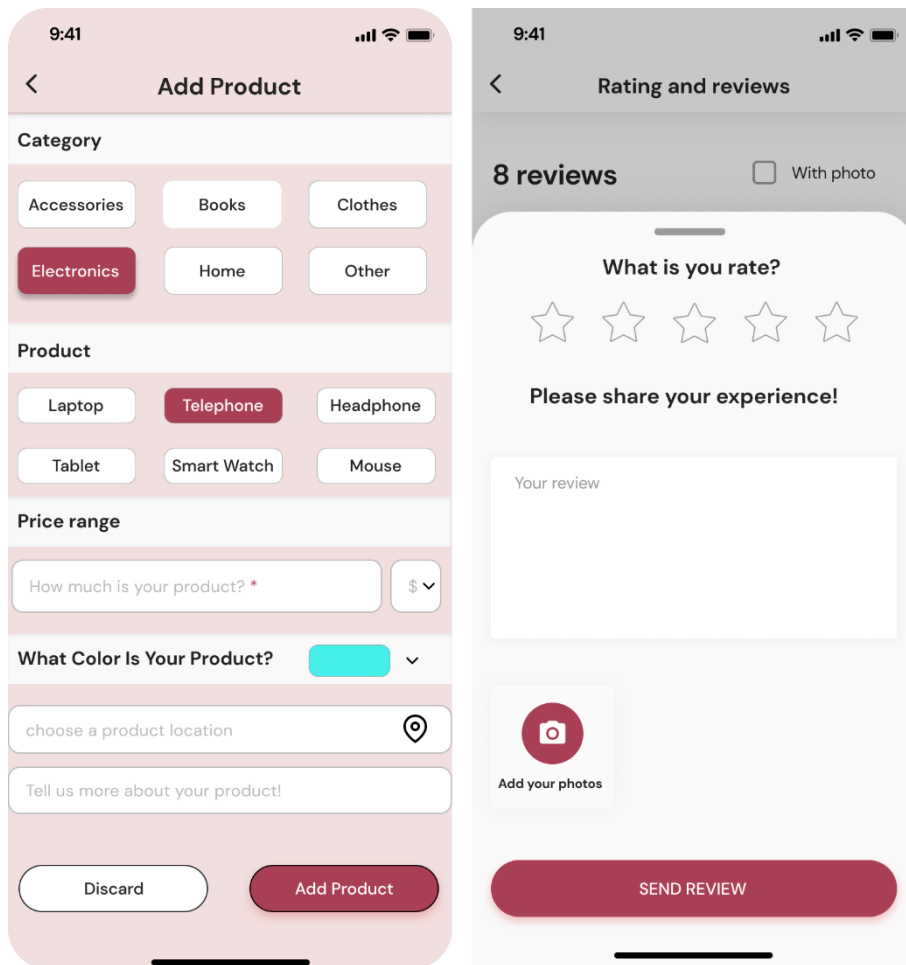
Our persona wanted to ask the seller detailed information about the products they wanted to buy, so we created a page where they can message the sellers and even send a voice message if necessary. Thus, users can negotiate for the price of the product and get answers to their questions about the product.



Users can add their favorite products to their Favorites and view them from this page. Additionally, if there are discounts on their favorite products, as mentioned by the persona, the user will receive a notification. We display an error message to the user indicating that the product they favorited is currently not available for sale, and we visually indicate the unavailability of the product by changing its color. By doing that, we adhere to Nielsen's "Visibility of system status" principle.



The interface where users can edit their profiles in the application. Here, individuals can enter necessary information about themselves and, if they wish to sell, they can add the product they want to sell from here. Additionally, they can rate and comment on the products they have previously purchased, as mentioned in the persona. We have preferred an aesthetic and minimalist interface from the Nielsen's heuristics for this page.



Users can transition to the "Add Product" page from the Profile tab if they wish to add a product. On this page, they can specify specific features of their products (category, price, color, etc.) in a way that is easily understandable to other users. In addition, users can evaluate the seller from whom they have previously purchased a product, and other users can have insights about the seller. By changing the color of the filters chosen by the seller, we have adapted to the visibility of system status again.

5. Collaborative Heuristic Evaluation (CHE):

As a group, we came together to conduct a Collaborative Heuristic Evaluation (CHE) for our application. We began by defining our tasks users would perform on our application. These tasks are:

- Block or report a seller directly from the messages screen.
- Compare prices of same items from different sellers
- Remove an item from the favorites list.
- Share a particular item listing with a friend.

Then, while trying to do these tasks, we encountered usability problems in our application. Each of our group members gave severity rankings point to these problems. Here are the usability problems we found:

- There is currently no feature in the messaging interface that allows users to report or block a seller directly.
- The app lacked a direct feature for comparing the prices of similar items from different sellers.
- The option to remove an item from the favorites list was not apparent.
- The option to share an item listing is not visible. This can prevent users from easily sharing product with friends or family.

After we found these problems, we match these with the heuristics from one of our heuristics sets (Nielsen & Molich or Petrie & Power). We evaluated how these problems affect the user and talked about how we can solve them. And we redesigned the pages that we saw problems in our application. You can see our CHE recording spreadsheets on the next pages.

Collaborative Heuristic Evaluation (CHE) recording spreadsheet:

Website/application under evaluation: Second hand sell & buy application										
Date: 19.5.2023										
Evaluators: Lara-Doğukan-Yağız-Engin-Buğra										
Heuristic set: Nielsen & Molich - Petrie and Power										
Individual Ratings										
Problem No	Task	Screen/Page	Problem description	Heuristics used	E1	E2	E3	E4	E5	Mean severity ranking
1	Block or report a seller directly from the messages screen	Message	There is currently no feature in the messaging interface that allows users to report or block a seller directly.	Nielsen & Molich Heuristics User control and freedom	4	4	4	4	4	4
2	Compare prices of similar items from different sellers	Home-Categories	The app lacked a direct feature for comparing the prices of similar items from different sellers.	Nielsen & Molich Heuristics Flexibility and efficiency of use and Petrie and Power Heuristics The interface should be intuitive and provide the necessary information	3	4	3	4	3	3.4
3	Remove an item from the favorites list	Favorites	The option to remove an item from the favorites list was not apparent	Nielsen & Molich Heuristics User control and freedom	4	3	4	4	4	3.8
4	Share a particular item listing with a friend	Product detail page	The option to share an item listing is not visible. This can prevent users from easily sharing product with friends or family	Petrie and Power Heuristics Provide the interactive functionality users will need and expect	3	3	4	4	3	3.4

These are our personal answers:

Lara:

Problem No	Rating	Description
1	4	The user might find it difficult to locate the report button, this is a crucial issue affecting trust in the platform
2	3	The user needs a straightforward way to compare prices from different sellers.
3	4	The problem has a major impact on the user's experience. It is difficult to manage the favorite list effectively.
4	3	The issue is significant. Sharing functionality is a standard feature and should be intuitive.

Doğukan:

Problem No	Rating	Description
1	4	It's a significant problem. If a user can't easily report a suspicious or malicious seller, they may lose trust in the system.
2	4	It's a considerable issue. An essential part of second-hand shopping is to find the best deals; if users can't compare prices easily, they might get frustrated.
3	3	The problem is significant, but it does not make the app unusable.
4	3	It's a noticeable problem. The sharing option should be more prominent.

Yağız:

Problem No	Rating	Description
1	4	The reporting feature should be in a more visible place. This is a safety issue, hence pretty serious.
2	3	The absence of an easy price comparison tool could lead to less efficient use of the app and impact the overall user experience
3	4	The problem is significant. Removing a favorite item should be a straightforward action
4	4	It's a major issue. Difficulties in sharing can limit user engagement and potentially reduce usage of the app.

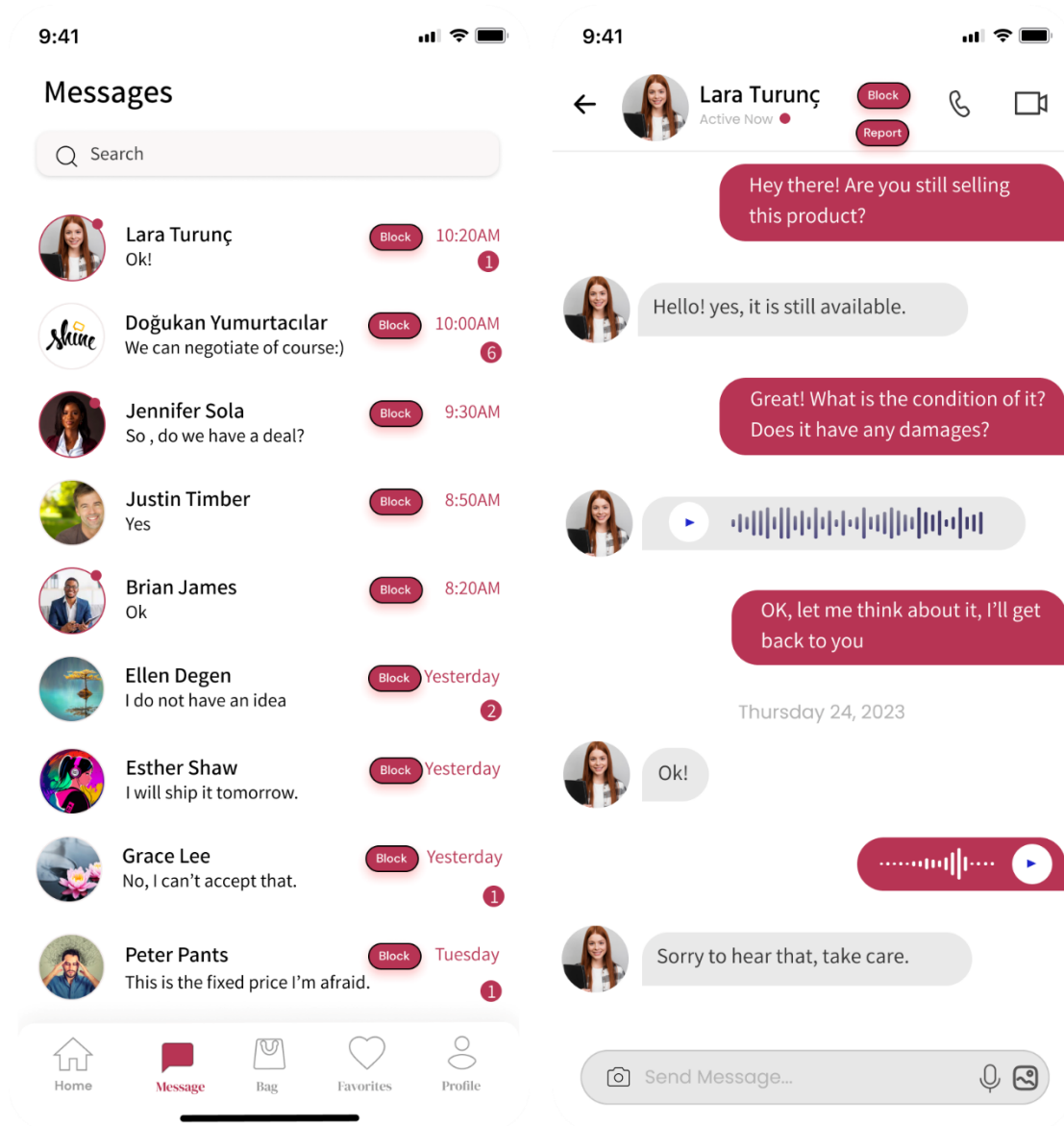
Engin:

Problem No	Rating	Description
1	4	This could lead to a decrease in the quality of app
2	4	This might not be a major issue for some users, but for those who are price sensitive, this could significantly impact their experience
3	4	The problem can cause frustration and loss of time.
4	4	It's a significant issue. The sharing function should be straightforward and easily accessible.

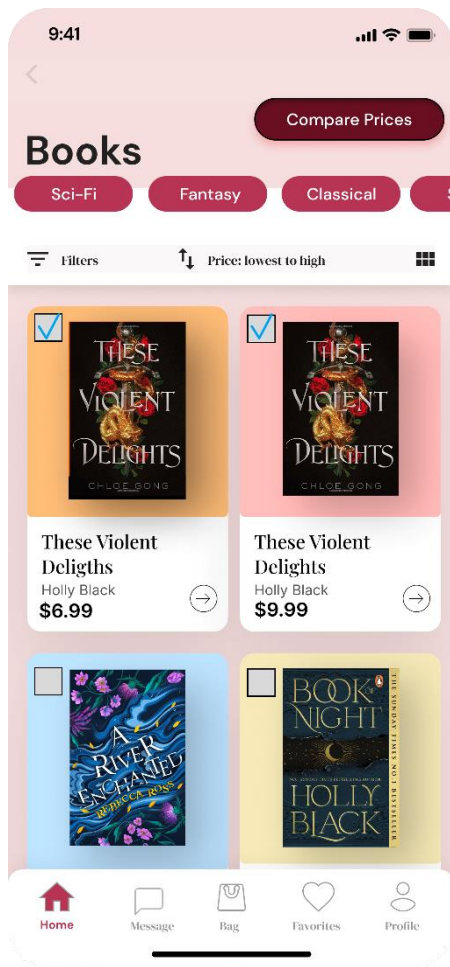
Şükrü:

Problem No	Rating	Description
1	4	It's a considerable issue. Users need to feel safe when conducting transactions
2	3	A price comparison feature would definitely enhance the user experience, and the lack of it could create an inconvenience
3	4	The issue is significant and affects user efficiency in managing their favorites.
4	3	It's a noticeable problem. Users might want to share items with friends, but the current design cant provide this

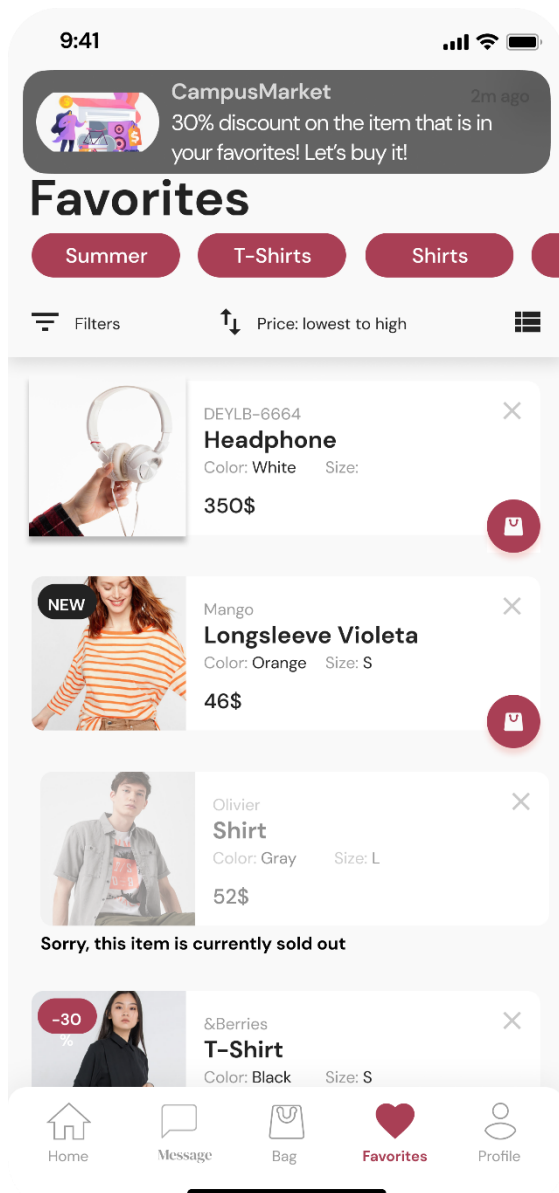
7.Re-design our prototype



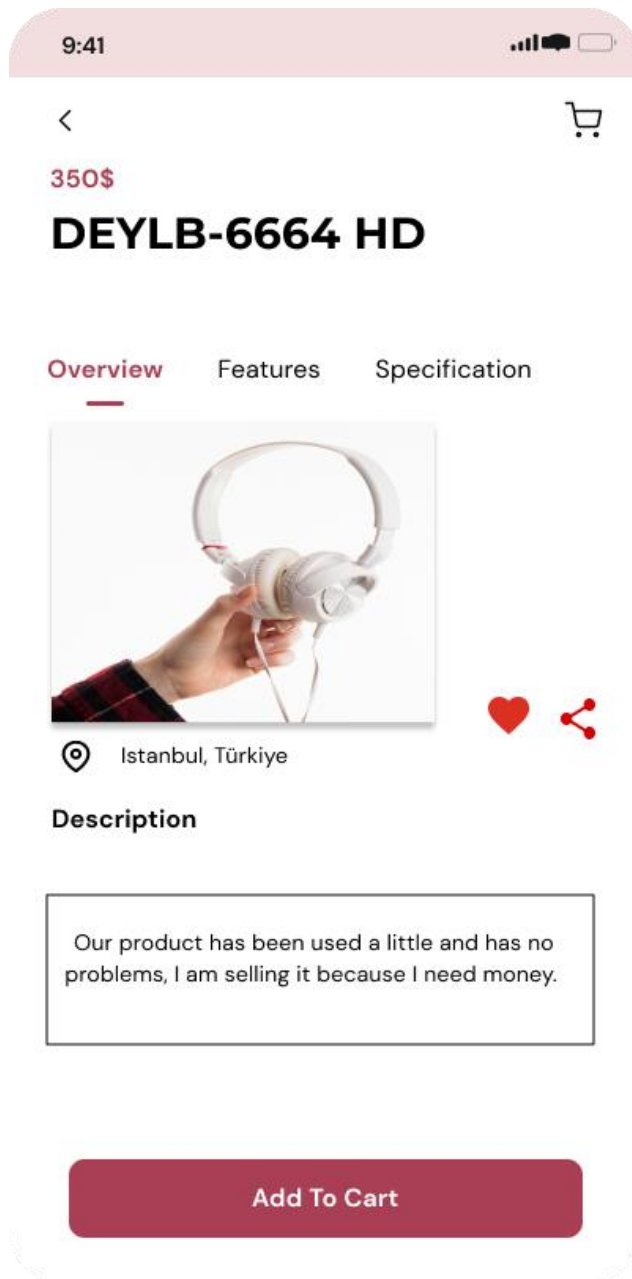
We re-designed our app's message pages after we completed CHE and added the "Block" and "Report" buttons therefore, we fixed a usability problem and made our app more efficient. Now, the users can feel more safe when using our app.



Following the CHE table, we added a comparison feature in the books page. Using this feature can help users to compare the prices of the same products that are sold by different sellers. Thanks to this feature, users can find the cheapest option for their desired products.



Looking at our CHE table, we realized that in the Favorites page, the user cannot delete an item that they favored. In the cases where the user has already bought the product from a different seller or decided not to buy it at all, “delete” options was highly necessary. Now that we added the feature, the user can easily add and remove products from their favorites list.



There was not a share option when the user displayed an item. Whenever they wanted to share the product with their friends whether to ask their opinion or show them to make sure that it is the product they were looking for, they were not able to. Now with the “Share” button, the users can share the item on social media or any messaging apps. This is also an important feature since Share option is a familiar concept to user and they expect it to see it.

8. Appendix

