REPUBLIC OF TÜRKİYE

İZMİR BAKIRÇAY UNIVERSITY

FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES

HAND2HAND

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GRADUATION PROJECT

Department of Management Information Systems

Supervisor

Assist. Prof, HUNAIDA AVVAD, P.H.D

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While some segments of society are unable to obtain many products they require for a variety of reasons, such as unequal income distribution or financial impossibilities, the remaining segments do not use the majority of the products they purchase arbitrarily, resulting in waste. While it is not entirely possible to prevent inequality in this area, it may be possible to reduce it. It is possible to socialize, shop, and communicate through social media, especially in this age when the internet has surrounded our world. Therefore, collaborating on the Internet can both help society and increase collaboration. With this in mind, we planned to create the Hand2Hand project. The aim of Hand2Hand is to put all kinds of second-hand goods (jackets, washing machines, armchairs, wardrobes, etc.) that people buy and use on our site and deliver to those in need. The distribution method on this site that we will develop will be as follows: the person asking for help leaves the product at a predetermined, known location, and the person asking for help can pick up the product from there. The so-called "shopping point" can be any place people choose (market, pharmacy, stationery, etc.). In this way, the awareness of such workplaces can be increased, and they contribute to society by providing benefits. Furthermore, with the assistance of mukhtars and municipalities, we are able to reach out to the needy on a broader scale. Getting help from government organizations can both help us increase our awareness and increase our reliability. There are similar ideas to our project. We talked about this in the References section. Our difference from them is that we protect the information of the users very well and publish it on the site, considering the personal information of the people who need help. Our main distinction is that our website is completely free and serves as a social network for charitable purposes.

ÖZET

HAND2HAND

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Yönetim Bilişim Sistemleri Bölümü

Bitirme Projesi

Danışman: Assist. Prof, HUNAIDA AVVAD, P.H.D

Toplumun bazı kesimleri ihtiyaç duydukları pek çok ürünü gelir dağılımı eşitsizliği veya maddi imkansızlıklar gibi çeşitli nedenlerle elde edemezken, geri kalan kesimler aldıkları ürünlerin büyük bir bölümünü keyfi olarak kullanmamakta ve bu da israfa neden olmaktadır. Bu alandaki eşitsizliği önlemek tamamen mümkün olmasa da azaltmak mümkün olabilir. Özellikle internetin dünyamızı sardığı bu çağda, sosyal medya aracılığıyla sosyalleşmek, alışveriş yapmak ve iletişim kurmak mümkün. Bu nedenle, İnternet üzerinde işbirliği yapmak hem topluma yardımcı olabilir hem de işbirliğini artırabilir. Bunu göz önünde bulundurarak Hand2Hand projesini oluşturmayı planladık. Hand2Hand'in amacı, insanların satın aldığı ve kullandığı her türlü ikinci el eşyayı (ceket, çamaşır makinesi, koltuk, gardırop vb.) sitemize koymak ve ihtiyaç sahiplerine ulaştırmaktır. Geliştireceğimiz bu sitede dağıtım yöntemi şu şekilde olacaktır: Yardım isteyen kişi ürünü önceden belirlenmiş, bilinen bir yere bırakır ve yardım isteyen kişi ürünü oradan alabilir. Belirlenmiş "drop-point" insanların seçtiği herhangi bir yer olabilir (market, eczane, kırtasiye vb.). Bu sayede bu tür işyerlerinin farkındalığı arttırılabilir ve fayda sağlayarak topluma katkı sağlarlar. Ayrıca muhtarlık ve belediyelerin de desteğiyle ihtiyaç sahiplerine daha geniş ölçekte ulaşabiliyoruz. Devlet kuruluşlarından yardım almak hem farkındalığımızı artırmamıza hem de güvenilirliğimizi artırmamıza yardımcı olabilir. Projemize benzer fikirler var. Referanslar bölümünde bundan bahsetmiştik. Onlardan farkımız, yardıma ihtiyacı olan kişilerin kişisel bilgilerini göz önünde bulundurarak, kullanıcıların bilgilerini çok iyi koruyarak sitede yayınlamamızdır. Ana farkımız, web sitemizin tamamen ücretsiz olması ve yardım amaçlı bir sosyal ağ olarak hizmet vermesidir.

1
INTRODUCTION

1.1 Introduction

As we can see many people give away items that they don't use anymore, but they have a hard time finding people in need. We are here to match people's needs with the given items.

Our aim is to let people to reach the items and products they need easily without paying, and at the same time, encourage people who have products that they do not need any more to give them rather than throw them away.

For the second semester, as a team, we have dedicated our focus to completing our site and bringing the project to life. We included topics such as the installation of the website, the connection of the database, the project plan, bilateral agreements, sponsorship, and advertisements.

2
SOCIAL EXPECTATIONS

It will be our priority to ensure that every stage of this project complies with the law and is developed while meeting societal expectations. These are various requirements, such as privacy and security, an easy-to-use website structure, and meeting needs. They cover a wide range of topics, including privacy and security, an easy-to-use website structure, and meeting customer needs. With Hand2Hand, an exchange will be made between people who have purchased the product before, used it for a short time, or never used it and those who need it, ensuring the privacy of their personal information. As we prioritize convenience in shipping, we aim to match the receiver and nearby contacts as a system priority, with transmitters to assist receivers at close range. Donors who want to help can send the products they own but no longer use after becoming members of the site. They can promote the product by uploading photos and writing a description. In this way, the transmitters make the work of the receivers easier, and it can be ensured that the product reaches the right person faster. Those in need can reach the product they want by sending a message through the site or by calling if the person helping them shares their number. Furthermore, the site will be able to advertise not only to those who give, but also to those who need it. In other words, people in need will be able to share an ad by specifying the product they need or easily search for the product they want from the search bar on the site. Necessary categories will be created within the site for ease of placing and searching for advertisements. In this way, very comfortable and secure communication will be provided between those who want to help and those who need help.

3
METHODOLOGY

3.1   Methodology

Website Programming Language and Techniques: In most scenarios, using only CSS and HTML is sufficient to create and design a website. But sometimes exceptional design also requires special tools. Javascript provides a more functional and responsive visual and usage experience on the website. Using Javascript can make the website more functional. In addition, a more detailed visual design can be made with Figma.

Database: The MySQL application is used to store data, and its language is SQL. It may be needed in website-building programs such as Wordpress to provide the necessary data and functions.

Data Modeling: System data will be modeled according to certain fields. Each entity and table will be based on their own fields. If necessary, there will be options such as transferring data between these tables or creating a new entity and table. With their inclusion on the site, users will be able to take advantage of important steps such as adding products while using the site and will be able to handle the transactions they want to do independently of the founder.

Data Protection: Data encryption is used to protect the important (user or business) data of the system in the database. Only those who can manipulate the database can access the decryption key.

"We have also examined the information that will enable the communication between the receiver and the donor within the site from a legal point of view." We checked the legal aspects and examined issues such as the social dimension of recipient-giver communication.

4
LEGAL ASPECTS

Privacy Policy

Your safety is important to us. For this reason, the personal data that users will share with us will be carefully protected.

We, the company name, as the data controller, with this privacy and personal data protection policy, which outlines which personal data will be processed for what purpose, with whom and why the processed data can be shared, our data processing method, and our legal reasons, aim to enlighten users about their rights regarding their processed data.

Collection Method and Legal Reason of Collected Personal Data

Your collected personal data, collection method, and legal reason

Your IP address and user agent information are only used for analytics and cookies, etc. and will be processed by means of technologies, automatic or non-automatic methods, and sometimes obtained from third parties such as analytical providers, ad networks, search information providers, and technology providers, and will be recorded, stored, and updated within the framework and duration of the service and the contractual relationship between us, on the basis of the legitimate interest processing condition.

Our primary goal in utilizing information between the seller and the buyer is to address legal aspects.

To communicate with and inform our customers about the terms, current status, and updates of the contracts, taking into account the articles related to the distance sales contract and the Law on the Protection of the Consumer.

To increase user satisfaction, we need to get to know our customers who give or receive information from websites and use them in customer environment analysis, marketing and advertising activities, and organizing surveys in an electronic or physical environment.

Regarding the processing of personal data, we will consider the legal aspects on our website and Articles 5 and 6 of the KVKK.

- There must be the express consent of the giver and recipient.
- All rules must be followed within the framework of the law.
- In the event of a contract, personal data will be processed.
- The necessity of data processing for the exercise and protection of customer rights
- Confidentiality principles will be complied with, provided that they do not harm the fundamental rights and freedoms of the customer.

Users' Rights Regarding Personal Data ProcessingPursuant to Article 11 of the KVKK, everyone can use the following rights by applying to the data controller:

- Learning whether personal data is processed or not,
- If personal data has been processed, requesting information about it,
- Learning the purpose of processing personal data and whether it is used in accordance with its purpose,
- To know the third parties to whom personal data is transferred within the country or abroad,
- Requesting correction of personal data in cases of incomplete or incorrect processing,
- Requesting the deletion or destruction of personal data,
- Requesting notification of the transactions made pursuant to subparagraphs (e) and (f) to third parties to whom personal data has been transferred,
- Objecting to the emergence of a result against the person himself by analyzing the processed data exclusively through automated systems,
- It has the right to seek restitution for the harm caused by wrongful processing of personal data.

Security:

All necessary measures will be taken to help protect information on our website from loss, theft, misuse, and unauthorized access, disclosure, modification, and destruction. We will provide limited personal data that we share with third parties.

FEBRUARY	MARCH	APRIL	MAY	JUNE
Project planning, requirements analysis and data collection.	Project planning, design and coding	Project planning, website development and design	Project planning, testing and control	Final Checks and Preparations for Publication
1.Project planning is the process by which the goals of the donation platform are determined and the management strategy of the project is established. As part of this task, we determined the purpose, target audience, donation process and other features to be presented to philanthropists as a team and audited the process every month. 2.Requirements analysis is a process to determine the requirements of the website. Within the scope of this task, Murat will provide a cargo system integration that will determine the details and requirements of the fundraising process and manage the cargo operations. (Murat)	**1.Project planning is the process by which the goals of the donation platform are determined and the management strategy of the project is established. As part of this task, we determined the purpose, target audience, donation process and other features to be presented to philanthropists as a team and audited the process every month. 2.The development process is the process of coding and creating the website. Within the scope of this task, Murat Emre will create the back side of the website based on the design documents. The design phase is a process that determines elements such as the user interface, usability and visual design of the donation platform. Within the scope of this task, Murat Emre and Pınar will design the website, improve the user experience and provide a mobile-friendly design.**	**1.Project planning is the process by which the goals of the donation platform are determined and the management strategy of the project is established. As part of this task, we determined the purpose, target audience, donation process and other features to be presented to philanthropists as a team and audited the process every month. 2.The design phase is a process that determines elements such as the user interface, usability and visual design of the donation platform. Within the scope of this task, Murat Emre and Pınar will design the website, improve the user experience and provide a mobile-friendly design. Maintenance and development: after publication, Pınar will follow the maintenance and development of the website. In this process, the team will report any errors on the website to İrem, taking into account user feedback, and improve the user experience by adding new features. It will also monitor the performance of the website and ensure that improvements are made when necessary. This task will continue on an ongoing basis.(Murat Emre Pınar)**	**1.Project planning is the process by which the goals of the donation platform are determined and the management strategy of the project is established. As part of this task, we determined the purpose, target audience, donation process and other features to be presented to philanthropists as a team and audited the process every month. 2.The testing and checking process is a process for testing the website after the development process and fixing bugs. For this task, İrem will test the website, get feedback from users and make corrections to address deficiencies. It will also test the efficiency and performance of the website.(İrem)**	**Team members will come together for the final control and publication preparations of the website. In this process, the necessary optimization processes will be carried out to correct the last errors on the website, to check the content for the last time, to make it SEO compatible and to open the website quickly. In addition, all technical and software settings necessary for the publication of the website will be completed and it will be ensured that all pages of the website are working properly.**

Creating Domain

One of the first steps for our website is to acquire a domain name and web hosting. The domain name is the unique identifier for our site, while the web hosting service provides the infrastructure and storage necessary to host our site online. Once we have secured your domain name, we can choose a hosting platform that suits your needs. For a hand-to-hand website, we chose to use WordPress as our hosting platform, as it provides a user-friendly interface and a wide range of customizable templates. Also for domain, we chose hand2handd.com.

Alan Adı	Durum ↑	Kaydın dolacağı tarih	Otomatik yenile	E-posta	İşlemler
hand2handd.com	● Etkin	3 Aralık 2023	⬤	+ Ekle	•••
🏠 Birincil site adresi					

Designing and Creating Content

Once we have chosen our hosting platform, we can begin creating content for our website. This might involve adding tools and shortcuts that are appropriate for our project, such as an account creation and login screen, or creating pages for all of users postings. It is also important to consider the design and layout of our site, and to choose a template or design that is suitable for our application. For our hand-to-hand website, we gave particular importance to intelligibility and usability, choosing a design that would be easy for users to navigate and understand.

Publishing

Once we have created our content and organized our site with sample ads and other relevant material, it is time to publish our site and make it accessible to all users. This involves ensuring that all of the elements of our site are functioning correctly, making any final tweaks or adjustments to the design and layout, and then launching the final version to the public. Depending on the nature of hand2hand website, we may also need

to consider factors such as search engine optimization and marketing in order to drive traffic to the site and build a community of users.

Tracking

We can also do follow-up processes between users very easily.

According to the shortcut we choose on the screen, we can notify the user that the order has been shipped, cancel it, or send an information message.

WordPress Statistics

With WordPress Statistics, we can track a wide range of metrics, including the number of visitors to our site, the pages they visit, the time they spend on each page, the devices they use to access the site, and much more.

We can then use this data to gain insights into our audience and optimize our website content and design to better meet the needs of their users.

- Real-time reporting: we can see up-to-the-minute data on user behavior on hand2hand website

- Audience reports: we can learn about the demographics and interests of our audience

- Acquisition reports: we can track how users are finding our site and which channels are driving the most traffic

- Behavior reports: we can understand how users are interacting with our site, including which pages are most popular and where users are dropping off

- Conversion tracking: we can set up goals and track user actions that lead to conversions, such as filling out a contact form or making a purchase

Yazılar & Sayfalar

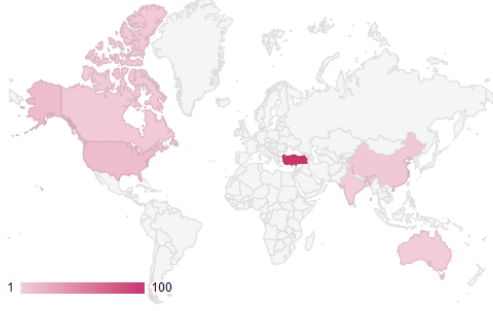|	Görüntülenme
HAND2HAND	76
POSTER	48

Ayrıntıları görüntüle

Yönlendirenler

	Görüntülenme
Arama Motorları ⌄	6
WordPress Android App	4

Ayrıntıları görüntüle

Ülkeler

		Görüntülenme
🇹🇷	Türkiye	100
🇺🇸	Amerika Birleşik Devletleri	12
🇨🇳	Çin	5
🇨🇦	Kanada	4
🇦🇺	Avustralya	2
🇮🇳	Hindistan	1

1 ▭ 100

Ayrıntıları görüntüle

Trafik   Analizler   Mağaza   Aboneler 1

7 günlük durum ⓘ

Ziyaretçiler	Görüntülenme	Beğeniler	Yorumlar
👥	👁	☆	💬
3 ↑ 3 (100%)	3 ↑ 3 (100%)	0 0 (0%)	0 0 (0%)

2023
Son güncelleme: 13:18 (Her 30 dakikada bir güncellenir)

← →   Gün | Hafta | Ay | **Yıl**

☑ Görüntülemeler   ☑ Ziyaretçiler

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

300
150
0

👁 Görüntülemeler	👥 Ziyaretçiler	☆ Beğenmeler	💬 Yorumlar
124	64	0	0

Ⓨ **Yoast SEO Premium ile sitenizin ziyaretçilerini artırın.**
Müthiş içeriklerinizi daha fazla insanın bulmasını sağlamak için Yoast SEO Premium'u satın alın.

Yoast Edinin   Bunu gizle ⌄

Yazılar & Sayfalar

	Görüntülenme
HAND2HAND	76
POSTER	48

Ayrıntıları görüntüle

Yönlendirenler

	Görüntülenme
Arama Motorları ⌄	6
WordPress Android App	4

Ayrıntıları görüntüle

DATABASE & SECURITY

Database Design: While doing our Hand2Hand project to design our database, we made use of the logical and physical data models in the Er diagrams, determined our requirements, and used them to model the databases.
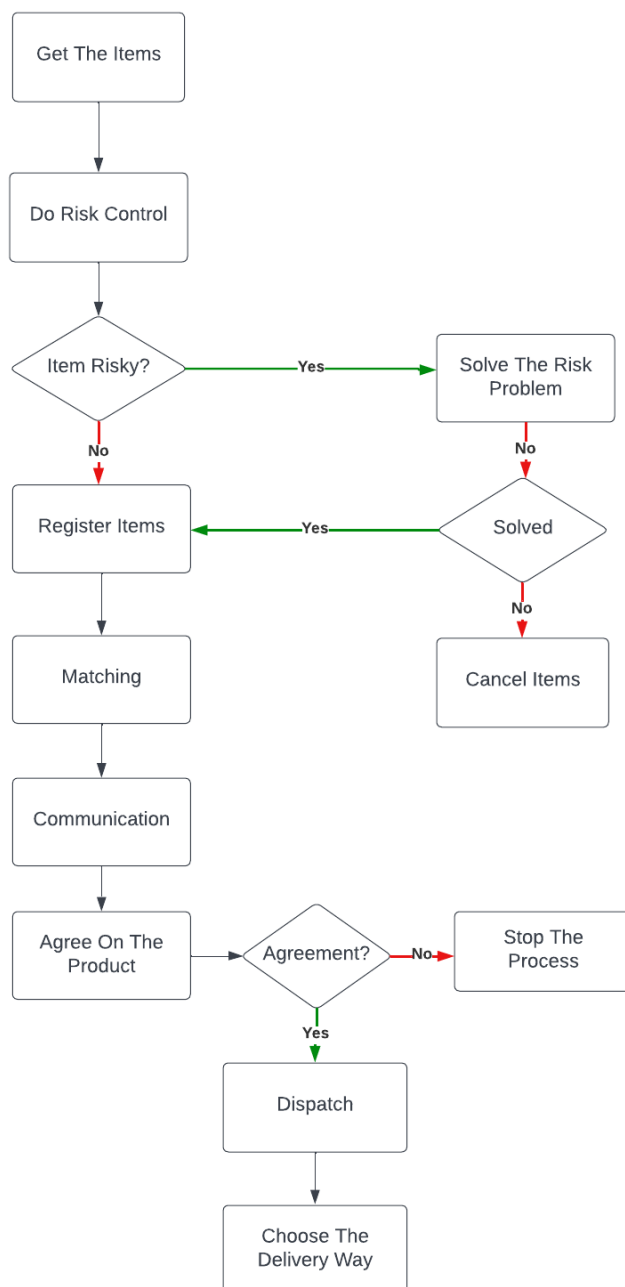
Database Troubleshooting: When drawing our ER diagrams, our goal is to troubleshoot the database and show where the fault lies. And for that too: We used it to analyze our database to find and solve problems in the logical and physical data models.
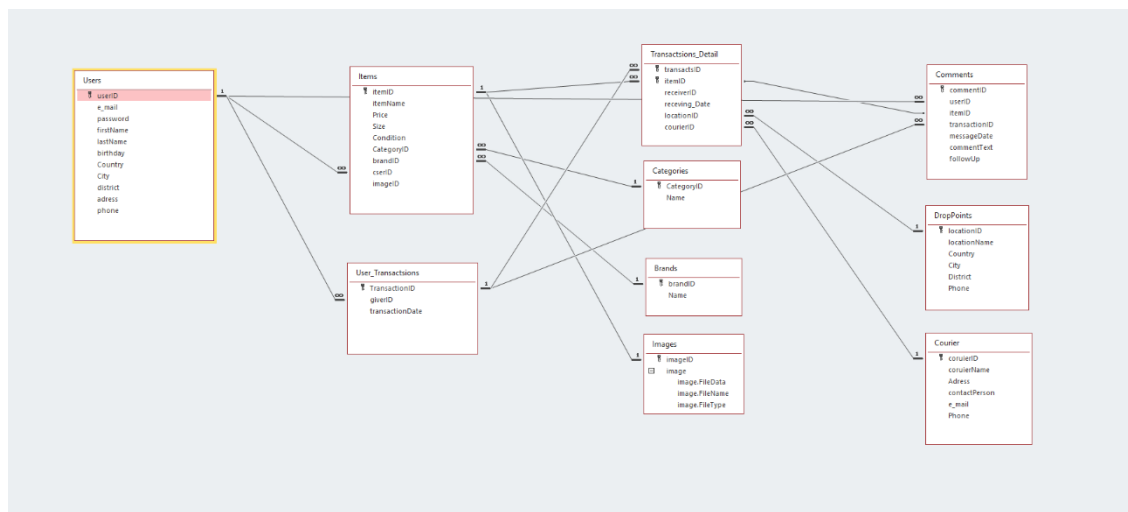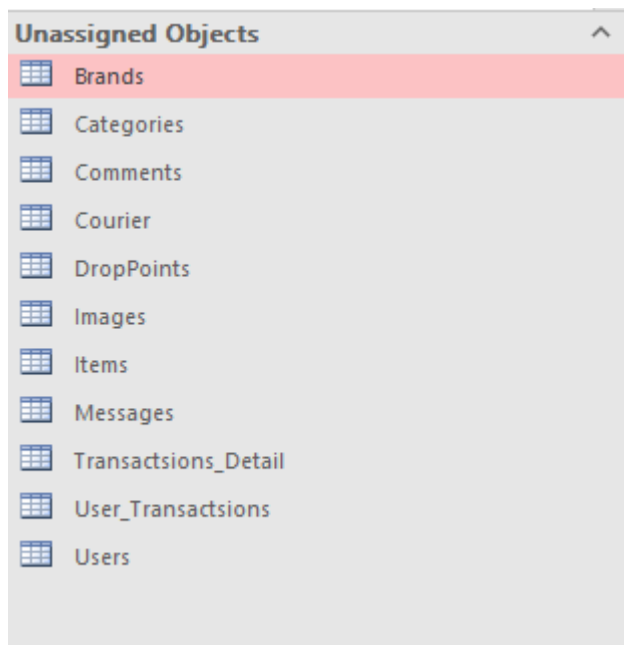
Project Process

It is seen with the diagram how the products coming to Hand2Hand go through a process. Risk control will be made on any product that will come to our site and listings that are considered safe will be shared

Use Case Section	Comment
Title	Add Advert on the Website
Description	A feature that allows users to add ads to the website to add products, get services, or for various purposes.
Actors	Registered users who want to add advert, website administrators who manage the ad advert process.
Preconditions	The user has an active account on the website and is logged in
Trigger	The user navigates to the ad adding section of the website.
Main Flow	a. User selects the type of ad they want to add (e.g., product, service). b. The user enters the posting details, including the title, description, images, location and contact information. c. User submits the advert for review. d. Administrator reviews the ad and approves it if it meets the website's advert adding guidelines. e. Administrator sends a confirmation email to the user with the ad status (approved or rejected). f. Approved ad is published on the website for public view.
Alternative Flows	a. If the ad does not meet the website's add advert guidelines, the administrator rejects the ad and sends a rejection email to the user with the reason for rejection b. If the user encounters any technical issues during the add advert process, they can contact customer support for assistance.
Postconditions	The advert is either approved and published on the website or rejected and not published on the website.
Exceptions	If the advert contains illegal or inappropriate content, the administrator may report it to the relevant authorities.
Technical Benefits	The add advert feature is easy to use and integrates seamlessly with the website's user interface, database, and payment system.

Future Enhancements	The add advert feature could include advanced targeting and customization options, such as audience segmentation, advert scheduling, and advert optimization tools.
Use Case Section	**Comment**
Title	Add Advert on the Website
Description	A feature that allows users to add ads to the website to add products, get services, or for various purposes.
Actors	Registered users who want to add advert, website administrators who manage the ad advert process.
Preconditions	The user has an active account on the website and is logged in
Trigger	The user navigates to the ad adding section of the website.
Main Flow	g. User selects the type of ad they want to add (e.g., product, service). h. The user enters the posting details, including the title, description, images, location and contact information. i. User submits the advert for review. j. Administrator reviews the ad and approves it if it meets the website's advert adding guidelines. k. Administrator sends a confirmation email to the user with the ad status (approved or rejected). l. Approved ad is published on the website for public view.
Alternative Flows	c. If the ad does not meet the website's add advert guidelines, the administrator rejects the ad and sends a rejection email to the user with the reason for rejection d. If the user encounters any technical issues during the add advert process, they can contact customer support for assistance.
Postconditions	The advert is either approved and published on the website or rejected and not published on the website.

Exceptions	If the advert contains illegal or inappropriate content, the administrator may report it to the relevant authorities.
Technical Benefits	The add advert feature is easy to use and integrates seamlessly with the website's user interface, database, and payment system.
Future Enhancements	The add advert feature could include advanced targeting and customization options, such as audience segmentation, advert scheduling, and advert optimization tools.

Use Case Section	Comment
Title	Website Account Creation
Description	A process that allows new users to create an account on the website and access various features and services.
Actors	New users who want to create an account, website administrators who manage the account creation process.
Preconditions	The user has access to the website and has not yet created an account.
Trigger	The user clicks on the "Create Account" button or navigates to the account creation section of the website.
Main Flow	a. User enters their personal information, including name, email address, and password. b. User completes a verification process, such as entering a verification code sent to their email or phone number. c. User submits their account information for review. d. User completes a verification process, such as entering a verification code sent to their email or phone number. e. User logs in to their account and accesses the website's features and services.
Alternative Flows	a. If the user encounters any technical issues during the account creation process, they can contact customer support for assistance.
Postconditions	The user has created an account on the website and can access its features and services.
Exceptions	If the user provides false or misleading information during the account creation process, their account may be terminated.
Business Benefits	The account creation process helps to increase user engagement and loyalty, generate user data and insights, and create opportunities for personalized marketing and targeted advertising.
Technical Benefits	The account creation process is user-friendly and secure, integrates with the website's database and authentication system, and ensures data privacy and protection.

Future Enhancements	The account creation process could include additional verification and authentication options, such as biometric identification or social media integration, and account customization features, such as profile creation or preference settings.

What to identify before developing a mobile app steps?

Before developing our mobile application, we must determine the factors we need and create an application that meets the needs of our target audience, is well-designed, and has the features and functions necessary for it to be successful. Here are the steps we need to do:

Target Audience: Identifying our target audience is crucial to creating an app that meets their needs and preferences. Our target audience is people who need help and people who want to help.

Implementation Purpose and Objectives: We need to define the purpose and objectives of our application. What problem does our app solve? What value do we offer our users? What are the main goals we want to achieve through the application? Answering these questions will help us create a clear vision for our practice.

Platform: Choosing the right platform for our app is crucial to reaching our target audience. Depending on our target audience and the features we want to offer, we will first develop an Android-based application.

AppF: In order to meet the needs of our target audience, we need to define the specific features and functionality that our app should have. Performing user research and analysis can help us determine what features are required and what can be left out.

App Design: An app that we design well can make a big difference in attracting and retaining users. We need to plan app design, including UI and user experience, to make sure it's intuitive, easy to use, and visually appealing.

4
RESULTS AND DISCUSSION

While developing the project, we realized that there was no similar project before. We have also witnessed that people adopt free items on sales platforms such as Facebook Marketplace, Letgo and Mercari.

While designing Hand2Hand, we wanted it to benefit society, and we developed our project to realize this. Thanks to this project, we have created an exemplary society where people can live economically comfortably. With this project, we created a platform where givers can give their items that they do not use anymore , while also helping by themselves by getting rid of their surplus items. More, people in need can get items and products easily that has never been before.

We designed and implemented a website for Hand2Hand. We analyzed similar websites and collected data for the website we were going to create. We took care to use the data while creating the website. While designing this website, we took care to create it in a way that every person can easily understand. We also created a separate area where the rules are written so that people can understand it better. We have meticulously written the codes to be more functional. Every stage has been tested and approved. We have enabled the users to help more in the close environment while using the website, but in case there are people who want to help or get help in more distant places, we have agreed with the cargo companies and we have made an agreement as the buyer has to pay.

REFERENCES

1. https://www.letgo.com/
2. https://dolap.com/
3. https://alseninolsun.net
4. https://www.kvkk.com.tc/