

Requirements of Graduation Project report



**Faculty of Engineering & Information Technology
Department of Computer Engineering
Graduation project**

Ideal charitable society



Supervisor: Dr-Suliman Abu Kharmeh

Students:

Yafa Nada

Raneen Salahat

presented in partial fulfillment of the requirements for Bachelor
degree in Computer Engineering

2025

Dedication

We thank God first for everything He has given us.

We dedicate this project and all our achievements to the great Palestine, our first inspiration.

Acknowledgment

we would like to thank our supervisor, Dr. Suleiman Abu Kharmeh, for his efforts with us and his fruitful advice, to our families who spared no effort in supporting us, to our supportive friends, and every person who supported us on this journey.

DISCLAIMER STATEMENT

This report was written by Yafa Nada and Raneen Salahat, students at the Computer Engineering Department, Faculty of Engineering, An-Najah National University. It has not been altered or corrected, other than editorial corrections, as a result of assessment and it may contain language as well as content errors. The views expressed in it together with any outcomes and recommendations are solely those of the students.

An-Najah National University accepts no responsibility or liability for the consequences of this report being for a purpose other than the purpose for which it was commissioned.

Abstract

The Ideal Charitable Society is an association located in the eastern side of the city of Nablus. It was established in 2005. It is an association specialized in collecting aid and distributing it to several types of needy people. After visiting the association's headquarters and studying its situation, it became clear that it suffers from major administrative problems, such that it is still carrying out all its work on Paper, so we decided to create a website and mobile application for the association to complete all its work digitally.

We divided the users of this system into four sections: the administrator (the president of the association), the donors, the needy, and the volunteers. We divided the needy into four main sections: orphans, students, people with special needs, and low-income families. We divided the types of donations into clothes, food parcels, clothing, and sanitary tools.

The admin's can access the data of all users and distribute donations to those in need, in addition to giving tasks to volunteers.

The system produces semi-annual financial reports for all resources, detailing all inputs and outputs from the association to the competent authorities such as the Ministry of Interior and the Ministry of Social Affairs.

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CHAPTER 1

INTRODUCTION

1.1 General background/problem

The paper system in the association has been the main problem for a long period of time, which has led to many difficulties during work, low efficiency and productivity, and inaccurate outputs, in addition to difficulty in distributing aid to the needy, scheduling the distribution and delivery process, in addition to creating accurate financial reports that support the transparency and integrity of the association.

1.2 Objective

Our main goal in this project is to create a system that includes a website and a mobile application to facilitate all administrative and logistical operations within the association, from donation operations from donors and sorting them according to their types, in addition to distributing them to the needy according to their entitlement and need, organizing the methods of their delivery, distributing tasks to volunteers and tracking their completion in addition to creating reports. Accurate information about the assembly status in terms of inputs and outputs.

As for the mobile application, in addition to the basic features, it facilitates the chat process between parties and the receipt of notifications.

CHAPTER 2

STANDARDS AND EARLIER COURSEWORK

2.1 EARLIER COURSEWORK

Many of the courses that we studied in the Computer Engineering Department had a major role in the success of this project due to our previous and good knowledge of the basics of building web, front-end and back-end projects in addition to databases, in addition to the correct foundations for building codes, as well as the principles of objective and hierarchical programming, and this is due to the web, software and data courses. Structure and Data Piece, in addition to the Software and Advance course, which had a great impact on our knowledge in raising quality and efficiency Code.

Chapter 3

Methodology

3.1 Constraints

learning new programming languages: This is the first time we are designing a mobile application, so we needed to learn React for web frontend and React Native for application and Django for backend , in addition to Firebase for notifications and conversations.

Features: This type of project requires great accuracy to include all cases and scenarios, in addition to accuracy in inputs and outputs and creating financial reports, so we have made a great effort to cover the widest range of cases and scenarios.

We needed to communicate continuously with the association: and obtain as much information and reports as possible to understand the system well and be able to implement it.

This type of project is highly sensitive: to the privacy of user information. We needed to restrict access to this information to the admin.

In addition to the fact that such associations are subject to strict laws related to collecting and distributing funds and resources, it was necessary to find several methods appropriate to the type of resources, in addition to preparing accurate reports to cover inputs and outputs.

3.2 Tools, method and programming language

In our project we use:

3.2.1 backend

Django Framework for BE: Accelerated Development: Django adheres to a "batteries-included" approach, offering a range of built-in functionalities such as Object-Relational Mapping (ORM), user authentication, and an administrative interface. Scalability: Django is adept at managing substantial traffic and intricate projects with efficiency.

3.2.2 Frontend

React, Material UI for FE: Component-Oriented Structure: Promotes the reuse of components and modular design, thereby accelerating the development process. Virtual DOM: Enhances performance by streamlining user interface updates. Extensive Ecosystem: The React ecosystem is rich with powerful libraries and tools for state management (such as Redux), routing, and additional functionalities.

React-Admin library for Admin panel: Prebuilt Admin Features: React-Admin supplies ready-made components for Create, Read, Update, and Delete (CRUD) operations. Customizable: Highly adaptable, allowing for the creation of custom workflows or user interface elements.

3.2.3 application

React Native for Mobile: Code Reusability: Allows for a single codebase to be deployed on both iOS and Android platforms. Live Reloading: Delivers immediate feedback on code modifications during the development phase. Community Support: A robust community and an extensive array of third-party libraries facilitate the handling of complex tasks.

3.2.4 schedule and SQL

Python scripts for scheduled tasks: Efficiency: The simplicity of Python enables the swift development of scheduled tasks. Flexibility: Libraries such as schedule, APScheduler, and Celery offer powerful scheduling functionalities. Integration: Seamlessly integrates with the Django backend for efficient task execution.

SQLITE DATABASE

SOCKET IO : for messaging and channels between BE and FE

Chapter 4

Result and Analysis

4.1 Research and data collection

We obtained all the information we needed to complete this project by visiting the association's headquarters, meeting with its director, and obtaining all the necessary data and information regarding the association's work, the services it provides, and the groups it targets.

4.2 Analysis and result

Home page of the website:



About us page:

An overview of the association and its work stations, in addition to a group of pictures that move automatically.



About Us

Your Digital Journey Starts Here. Dive into Charity's Expertise.



Who We Are

A charitable association established in 2005, located in the eastern region of Nablus, providing all types of donations to needy groups such as orphans, people with special needs, large



Our Impact

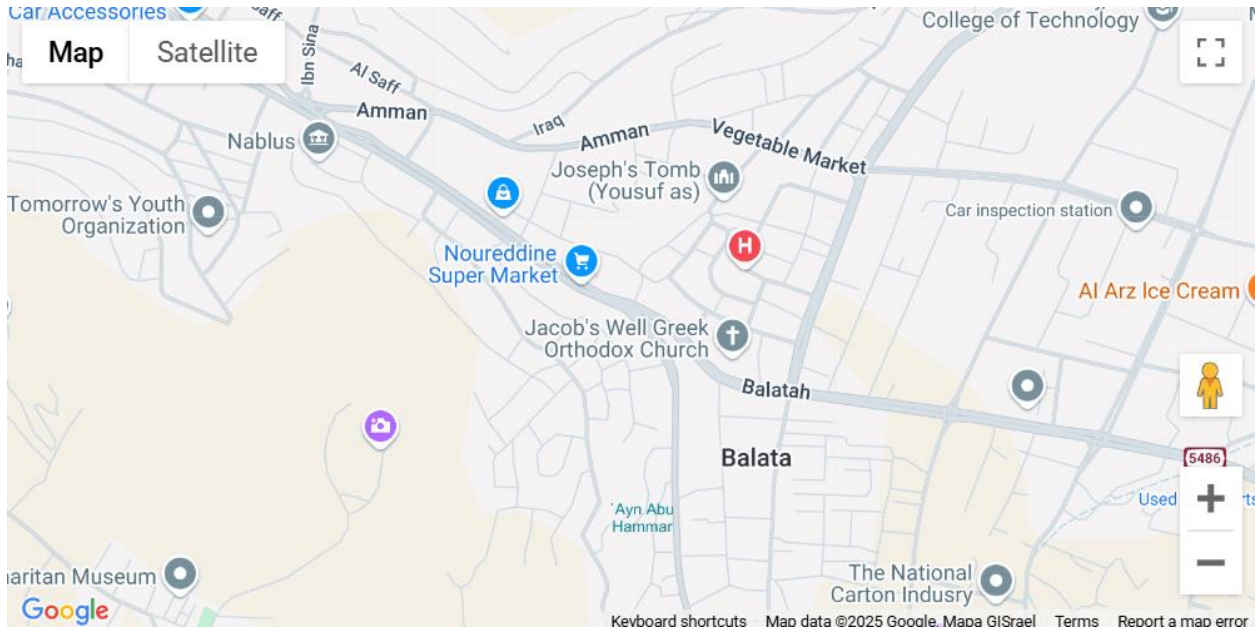
Over the years of the association's work, we have provided university fees for more than 2,000 students, and the association contains more than 3,000 orphan sponsorship files. We continue with your constant support.



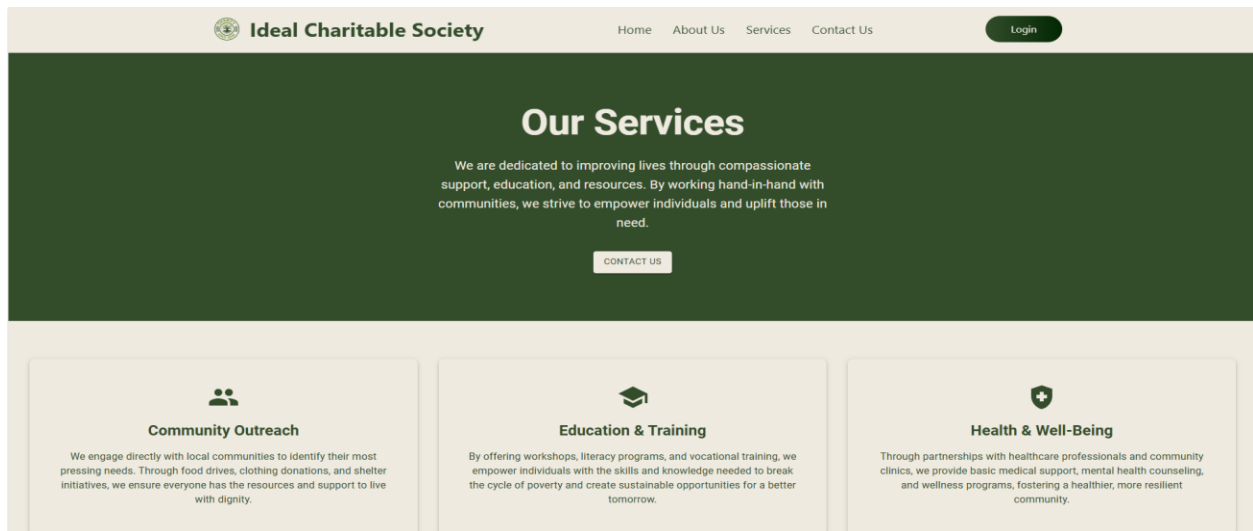
Get Involved

We have distributed food supplies, clothina, and the needs of needu families

Google map for location :

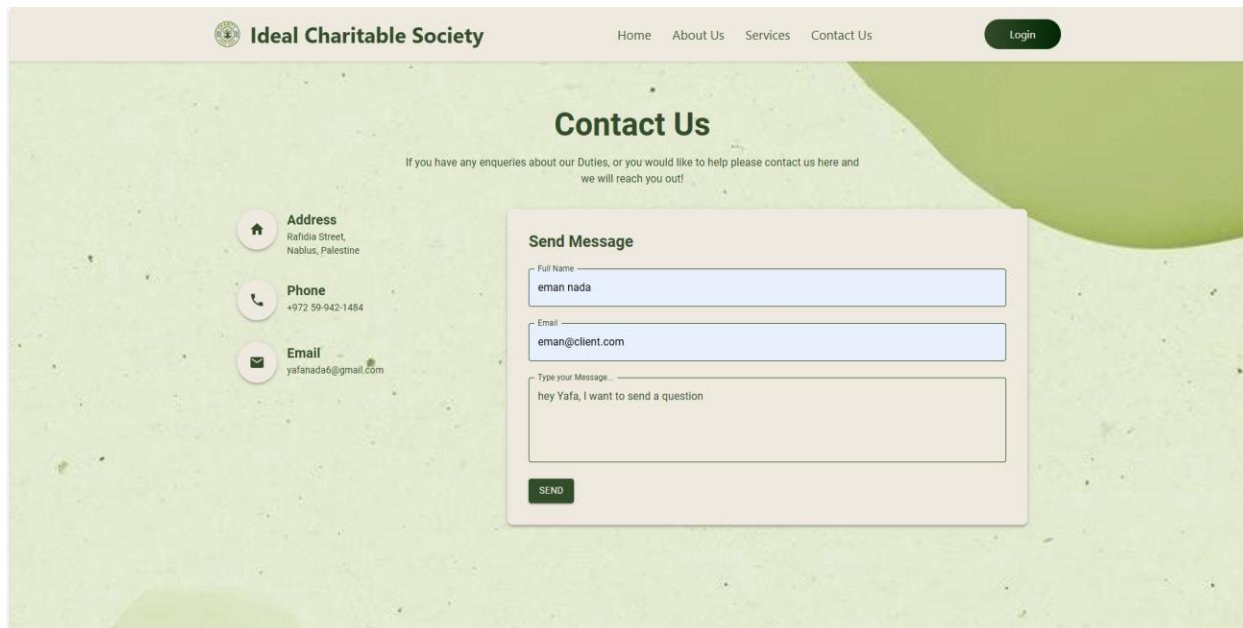


Services page: This page describes all the services and assistance provided by the association

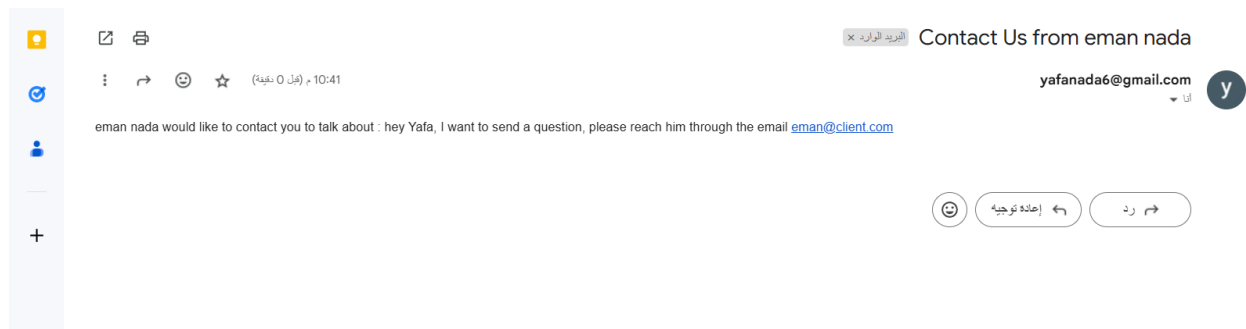


contact us page:

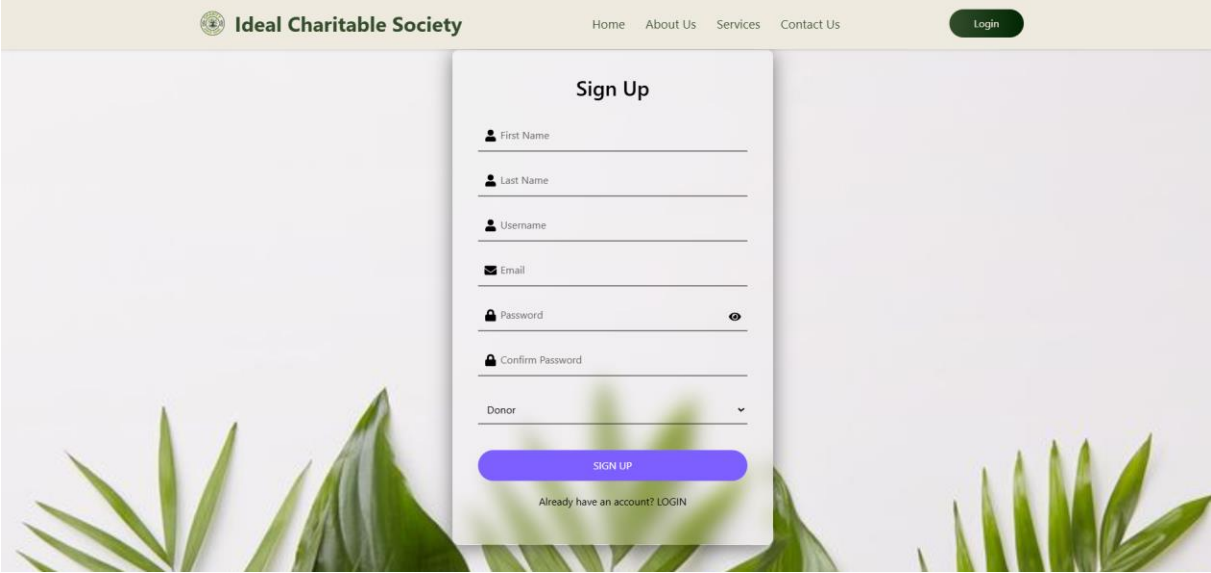
The user can obtain all contact information through this page, in addition to the possibility of sending a message to the admin responsible for the site, and it reaches the admin via email.



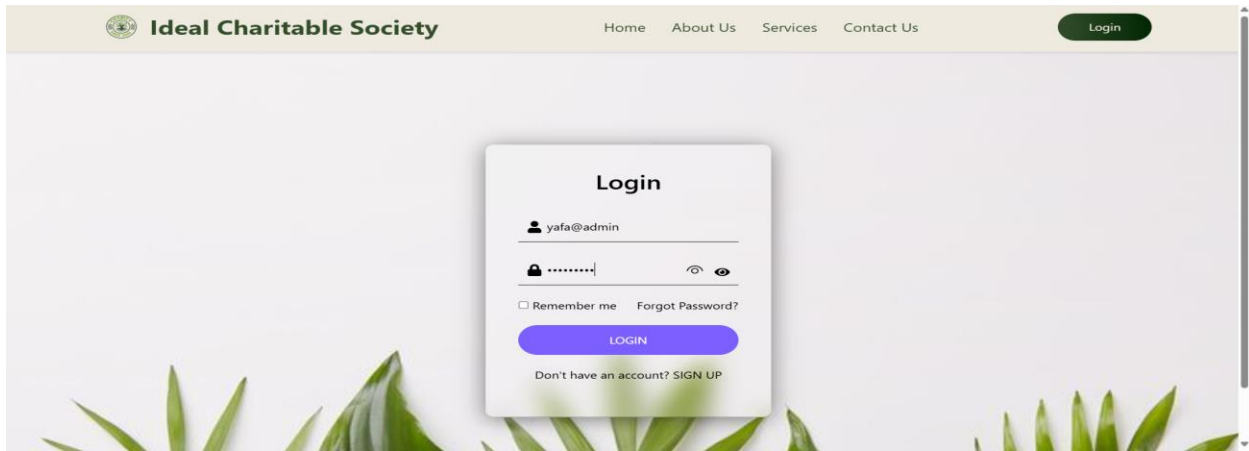
Access the message to the admin email



sign up page: to create account for user, doner, volunteer and admin.



Log in as Admin:



It displays all users who have created accounts on the site for the admin:

The image shows a dark-themed 'Users' management interface. On the left is a sidebar with a menu containing 'Users', 'Donors', 'Volunteers', 'Admins', 'Items', 'Helps', and 'Tasks'. The main area displays a table of users with columns for 'Id', 'First name', 'Last name', 'Role', 'Email', 'Username', 'Is active', and 'Image'. The table contains seven rows of user data. At the top right of the interface, there are icons for settings, refresh, and the current user 'yafa@admin', along with '+ CREATE' and 'EXPORT' buttons. At the bottom right, it shows 'Rows per page: 10' and '1-7 of 7'.

It displays all doners who have created accounts on the site for the admin:

The screenshot shows the 'Donors' management page. On the left is a sidebar with navigation options: Users, Donors, Volunteers, Admins, Items, Helps, and Tasks. The main area displays a table of donor accounts. At the top right, there are icons for settings, refresh, and user profile (yafa@admin), along with '+ CREATE' and 'EXPORT' buttons. The table has columns for selection, Id, First name, Last name, Role, Email, Username, Is active, and Image. The data rows are as follows:

<input type="checkbox"/>	Id ↑	First name	Last name	Role	Email	Username	Is active	Image
<input type="checkbox"/>	3	yafa	doner	2	doner@gmail.com	doner	✓	/images/images/doner.bmp
<input type="checkbox"/>	9	yafa	doner	2	yafa@doner2.com	yafadoner2	✓	
<input type="checkbox"/>	12	khaled	nada	2	khaled@doner.com	khaleddonor	✓	/images/images/khaleddonor.gif
<input type="checkbox"/>	13	eman	nada	2	eman@doner.com	emandoner	✓	
<input type="checkbox"/>	14	marah	doner	2	marah@doner.com	marahdoner	✓	
<input type="checkbox"/>	15	karam	nada	2	karam@doner	karamdoner	✓	
<input type="checkbox"/>	20	khaled	nada	2	khaled@admin.com	khalednada	✓	
<input type="checkbox"/>	23	waleed	nada	2	waleed@doner.com	waleed	✓	

At the bottom right, it shows 'Rows per page: 10' and '1-8 of 8'.

It displays all volunteers who have created accounts on the site for the admin:

The screenshot shows the 'Volunteers' management page. The sidebar and top navigation are similar to the Donors page. The table displays volunteer accounts with the following data:

<input type="checkbox"/>	Id ↑	First name	Last name	Role	Email	Username	Is active	Image
<input type="checkbox"/>	6	yafa	volunteer	3	yafa@volunteer	volunteer	✓	
<input type="checkbox"/>	16	karam	nada	3	karam@volunteer	karamvlunteer	✓	
<input type="checkbox"/>	17	waleed	nada	3	waleed@volunteer.com	waleedvolunteer	✓	
<input type="checkbox"/>	18	mhmah	nada	3	mhmah@volunteer	mhmahvolunteer	✓	/images/images/mhmahvolunte
<input type="checkbox"/>	19	eman	nada	3	eman@volunteer	emanvolunteer	✓	
<input type="checkbox"/>	21	yafa	volunteer	3	yafa@volunteer	yafa@volunteer	✓	

At the bottom right, it shows 'Rows per page: 10' and '1-6'.

With the ability to add accounts for the needy, donors, and volunteers by the admin, in addition to the ability to export these tables and download them as files.

It displays all admins who have created accounts on the site :

<input type="checkbox"/>	Id ↑	First name	Last name	Role	Email	Username	Is active	Image
<input type="checkbox"/>	1	Yafa	Admin	4	admin@admin.com	admin	✓	
<input type="checkbox"/>	4	yafa	admin	4	yafa@admin	admin@gmail.com	✓	/images/images/admingmail.com.gif

Rows per page: 10 ▾ 1-2 of 2

It displays all the items donated by donors, along with their details:

Items	Id ↑	Title	Description	Count	Type	Donor
<input type="checkbox"/>	2	package of rice	6 package of rice each package 25kg	6	FOOD_PACKAGES	marah doner
<input type="checkbox"/>	3	package of oil	two package of oil each package 20kg	2	FOOD_PACKAGES	marah doner
<input type="checkbox"/>	4	clothing for kids	12 sport suit for kids	12	CLOTHING	eman nada
<input type="checkbox"/>	5	clothing for women	50 different piece of T-shirt and pants for women	50	CLOTHING	eman nada
<input type="checkbox"/>	6	money for student	6000\$ for 6 student	6,000	MONEY	khaled nada
<input type="checkbox"/>	7	Wheelchair	Wheelchair	1	MEDICAL_TOOLS	khaled nada
<input type="checkbox"/>	8	package of food	package contain 8 types of food	1	FOOD_PACKAGES	karam nada
<input type="checkbox"/>	9	package of food	package contain 8 types of food	0	FOOD_PACKAGES	khaled nada
<input type="checkbox"/>	10	Wheelchair	Wheelchair	1	MEDICAL_TOOLS	eman nada
<input type="checkbox"/>	11	money		500	MONEY	eman nada
<input type="checkbox"/>	12	money		500	MONEY	karam nada
<input type="checkbox"/>	13	money		200	MONEY	waleed nada

Rows per page: 10 | 1-10 of 12 | 1 2 >

It displays all the aid that has been distributed to those in need, whether manually by the admin or automatically, according to what is programmed.

Helps	Id ↑	Title	Description	Client	Delivery Type	Items Count
<input type="checkbox"/>	2	package of rice	package	eman nada	Not Assigned Yet	1
<input type="checkbox"/>	3	package of food	package	eman nada	PICKUP	1
<input type="checkbox"/>	4	package of rice	package	mhmd user	Not Assigned Yet	1
<input type="checkbox"/>	5	Monthly Amount for eman nada for 01/2025	Monthly Payment for Client eman nada for 01/2025 as monthly payment paid automatically as help using Automatic Distribution	eman nada	Not Assigned Yet	1
<input type="checkbox"/>	6	Monthly Amount for hala haj for 01/2025	Monthly Payment for Client hala haj for 01/2025 as monthly payment paid automatically as help using Automatic Distribution	hala haj	Not Assigned Yet	1

Rows per page: 10 | 1-5 of 5

And admin can create helps to user:

Title
 Description
 Items: clothing for kids
 User: mhmd user
 SAVE

Shown here are all the tasks that are added for volunteers:

<input type="checkbox"/>	Id ↑	Title	Description	Status	Assignee
<input type="checkbox"/>	1	drawing on faces	drawing on childe face	IN_PROGRESS	yafa volunteer
<input type="checkbox"/>	2	clean walls	clean	DONE	yafa volunteer
<input type="checkbox"/>	3	clean street	clean faisal street	DONE	mhmad nada
<input type="checkbox"/>	4	visit cancer center	visit in january 2025	IN_PROGRESS	mhmad nada
<input type="checkbox"/>	5	draw at childreen face	visit school	PENDING	mhmad nada

Rows per page: 10 | 1-5 of 5

And admin can create a task to a volunteer

Create Task yafa@admin

- Users
- Donors
- Volunteers
- Admins
- Items
- Helps
- Tasks

Id

Title

Description
clean faisal street

Status
Pending

Assignee
yafa volunteer

SAVE

Log in as doner:

Ideal Charitable Society Home About Us Services Contact Us Login

Login

Remember me [Forgot Password?](#)

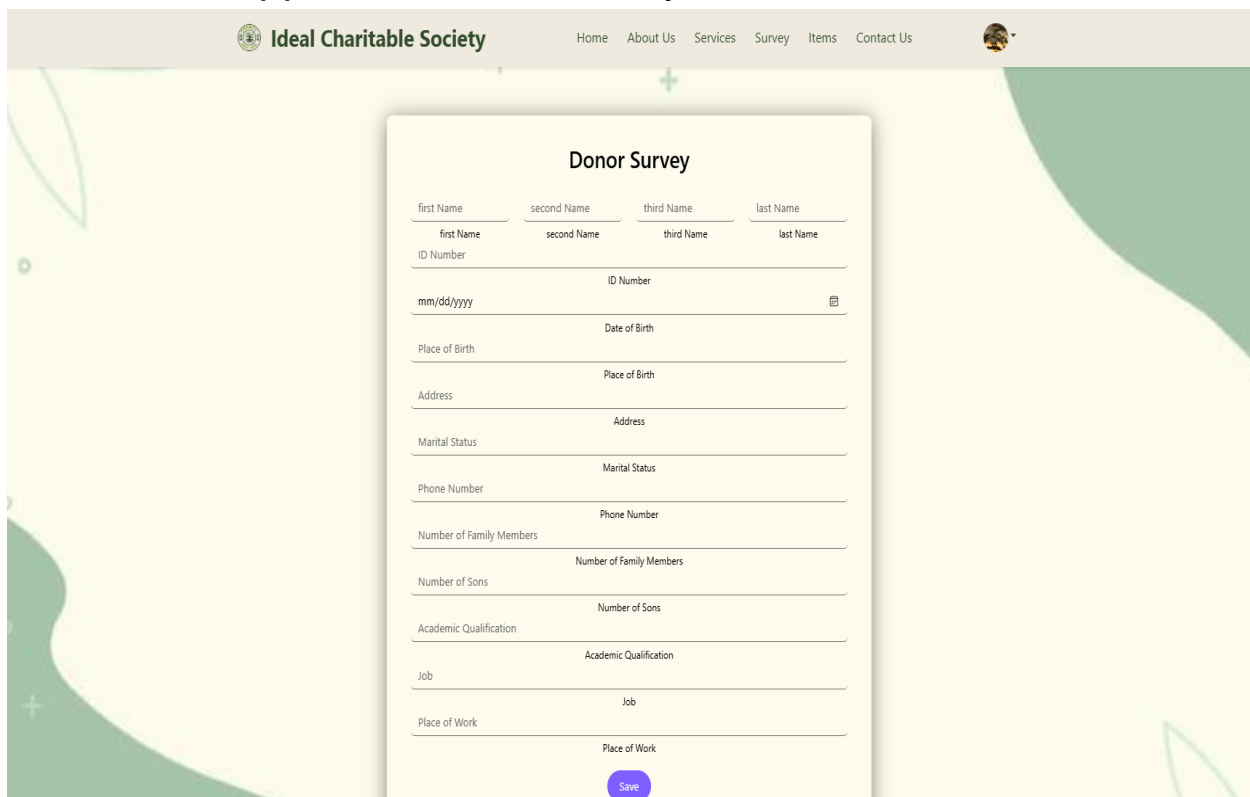
[LOGIN](#)

[Don't have an account? SIGN UP](#)


doner profile:



Survey: The donor form contains all the information you need to fill out to be approved as a donor by the association.



Item page :Adding donations by the donor, specifying their type and number, and adding a photo

 **Ideal Charitable Society** Home About Us Services Survey Items Contact Us

Add New Item

Title
package of food

Description
package contain 8 types of food



Type
Food Packages

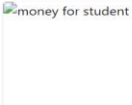
Count
1

[UPLOAD IMAGE](#)

[ADD ITEM](#)


And the item show as following:

 **Ideal Charitable Society** Home About Us Services Survey Items Contact Us 




money for student

Amount 6000
6000\$ for 6 student
Type: MONEY



Wheelchair

Count 1
Wheelchair
Type: MEDICAL_TOOLS



package of food

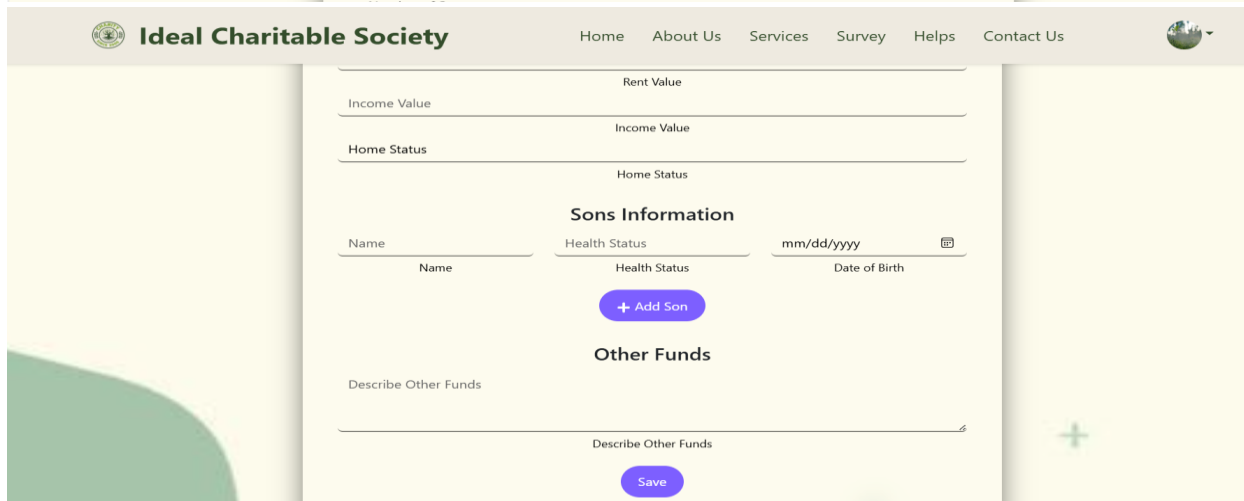
Count 0
package contain 8 types of food
Type: FOOD_PACKAGES

Log in as user(needy):

User profile:



Social survey form: which contains all the necessary information from those in need of the association



Help page: This page displays all the aid that reaches the needy, whether it is distributed manually by the administrator or automatically, in addition to a section for the method of receiving

the helps, whether delivery or receipt from the headquarters, and if the amount of money is a bank transfer.

The image shows two screenshots of the Ideal Charitable Society website. The top screenshot displays a list of help items under the 'NEW HELPS' tab. Two items are visible: 'package of rice package' and 'package of food package'. Both items have a placeholder icon that says 'NO IMAGE AVAILABLE'. The bottom screenshot shows a detailed view of the 'package of food' item. It features a photograph of various food items like rice, oil, and instant noodles. Below the photo, the text reads: 'package of food', 'Count 0', 'package contain 8 types of food', and 'Type:'. The page also includes a navigation menu with 'Home', 'About Us', 'Services', 'Survey', 'Helps', and 'Contact Us', and a logo for 'Ideal Charitable Society'.

Receivina Ootion

package of food
Count 0
package contain 8 types of food
Type:

Receiving Option

Select Type

SUBMIT

Receiving Option

Pick Up

- Select Type
- Pick Up
- Delivery
- Bank Transfer


Receiving Option

Bank Transfer


Bank Account / Reflect Account

SUBMIT

After determining the method of receipt, the help is transferred to the previous help section.

 **Ideal Charitable Society** Home About Us Services Survey Helps Contact Us

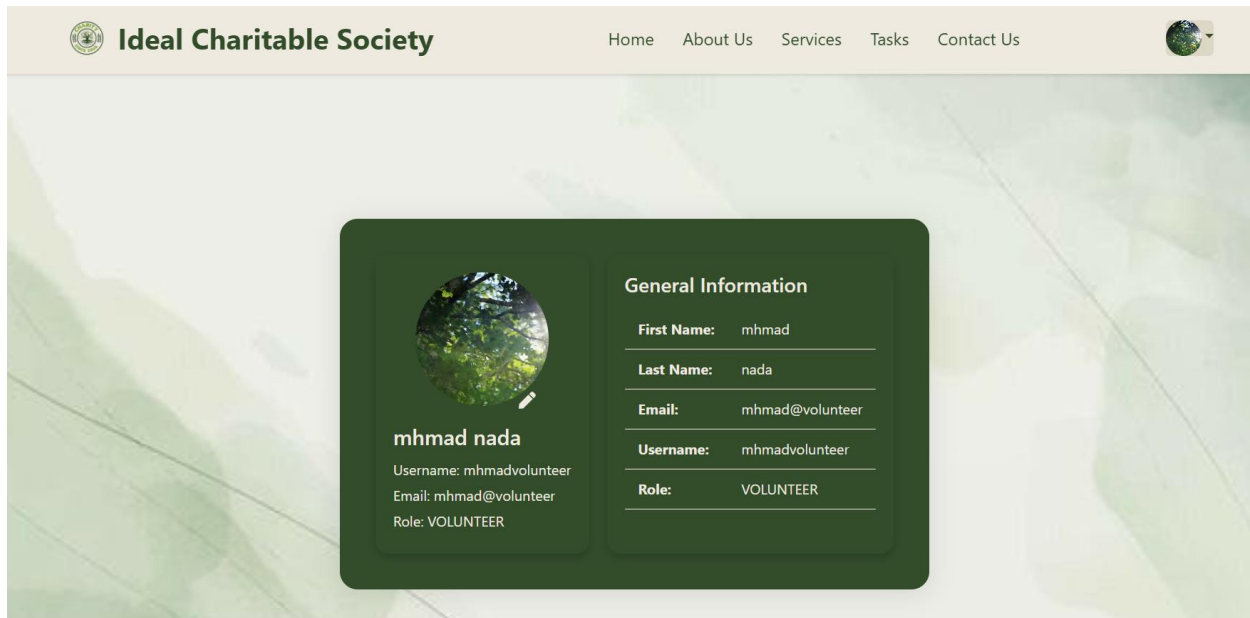
NEW HELPS **PREVIOUS HELPS**


NO IMAGE AVAILABLE

package of food
package

Log in as volunteer

Volunteer profile

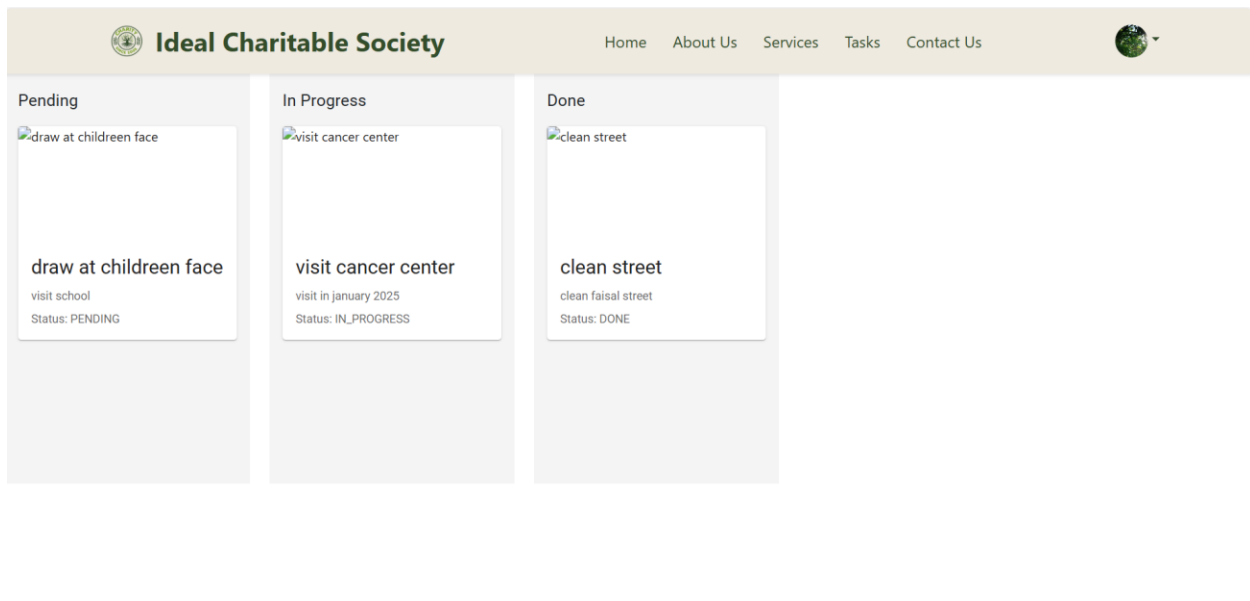


The screenshot shows a web page for 'Ideal Charitable Society'. The header includes the organization's logo and name, and navigation links for Home, About Us, Services, Tasks, and Contact Us. The main content area features a dark green profile card for a volunteer named 'mhmada nada'. The card includes a profile picture of a globe, the volunteer's name, and their details: Username: mhmadvolunteer, Email: mhmada@volunteer, and Role: VOLUNTEER. To the right of the profile picture is a 'General Information' section with a table of details.




General Information	
First Name:	mhmada
Last Name:	nada
Email:	mhmada@volunteer
Username:	mhmadvolunteer
Role:	VOLUNTEER

On this page, all tasks added by the admin for the volunteer appear.

You go through three cases that have either not been started yet, are in progress, or have been completed.



The screenshot shows a task management page for 'Ideal Charitable Society'. The header includes the organization's logo and name, and navigation links for Home, About Us, Services, Tasks, and Contact Us. The main content area is divided into three columns: Pending, In Progress, and Done. Each column contains a list of tasks with their status and details.

Pending	In Progress	Done
 draw at children face visit school Status: PENDING	 visit cancer center visit in january 2025 Status: IN_PROGRESS	 clean street clean faisal street Status: DONE

Yearly Report:

Annual reports are prepared automatically by the system, showing all of the association's inputs and outputs, including resources, money, and revenues, and are automatically sent to the competent authorities.

The screenshot shows a web browser displaying the 'Ideal Charitable Charity' interface. The main content is a table titled 'Yearly Report of Helps' with the following data:

Orphan	Items	Donors	Description
eman nada	• 0	marah doner	package
eman nada	• 0	khaled nada	package
mhmd user	• 0	karam nada	package
eman nada	• 0	eman nada	Monthly Payment for Client eman nada for 01/2025 as monthly payment paid automatically as help using Automatic Distribution
hala haj	• 0	waleed nada	Monthly Payment for Client hala haj for 01/2025 as monthly payment paid automatically as help using Automatic Distribution

Yearly Report of Money Items

Item Title	Description	Assigned	Donor
package of oil	two package of oil each package 20kg	False	marah doner
clothing for kids	12 sport suit for kids	False	eman nada
clothing for women	50 different piece of T-shirt and pants for women	False	eman nada
Wheelchair	Wheelchair	False	khaled nada
Wheelchair	Wheelchair	False	eman nada
money		False	karam nada

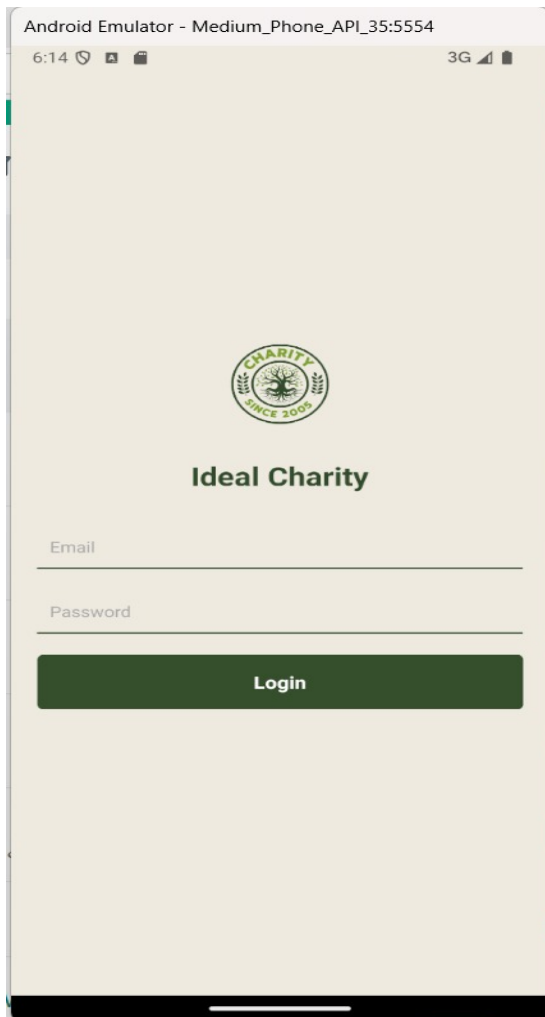
Yearly Report of Remained Items

Item Title	Description	Donor
package of oil	two package of oil each package 20kg	marah doner
clothing for kids	12 sport suit for kids	eman nada
clothing for women	50 different piece of T-shirt and pants for women	eman nada
Wheelchair	Wheelchair	khaled nada
Wheelchair	Wheelchair	eman nada
money		karam nada

4.3 the mobile application:

The application contains all the services available on the website (except for filling out forms that require long information and uploading files), in addition to chat between the admin, volunteers, the needy, and donors, in addition to the notifications that arrive when sorting any assistance for the needy or a task for the volunteer.

First page:





Welcome To Ideal Charity

Services Provided

- Food Distribution
- Medical Aid
- Educational Support
- Shelter Provision

Who Do we Serve

- Orphans
- University Students
- People With Medical Needs
- Needed Families

Developers

- Yafa Nada
- Raneen Raed



Home



Profile

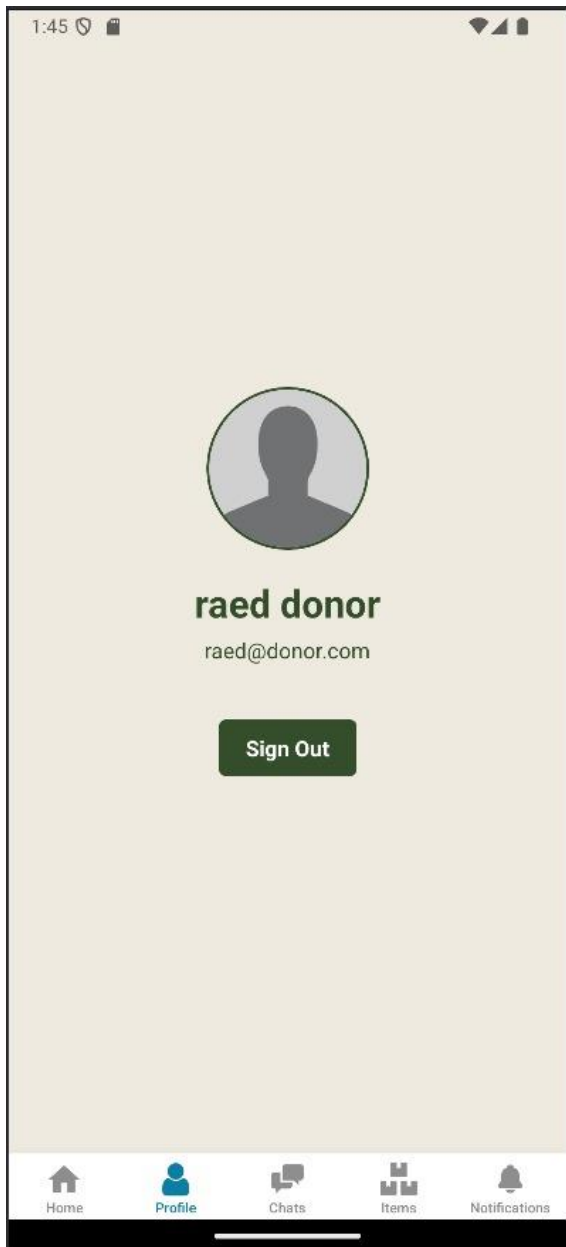


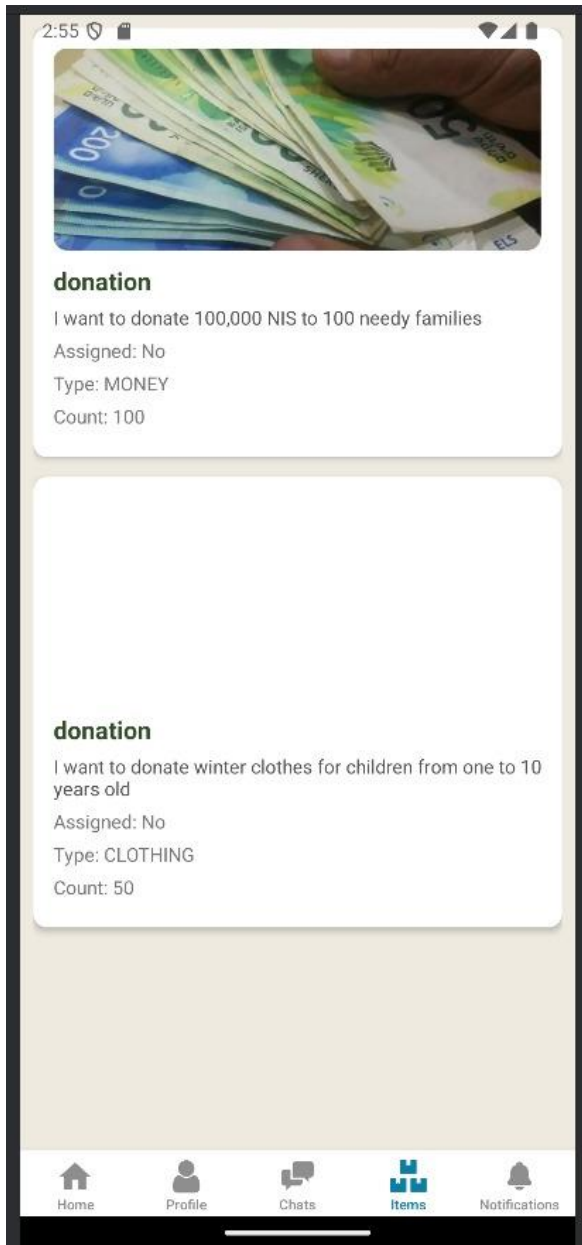
Chats



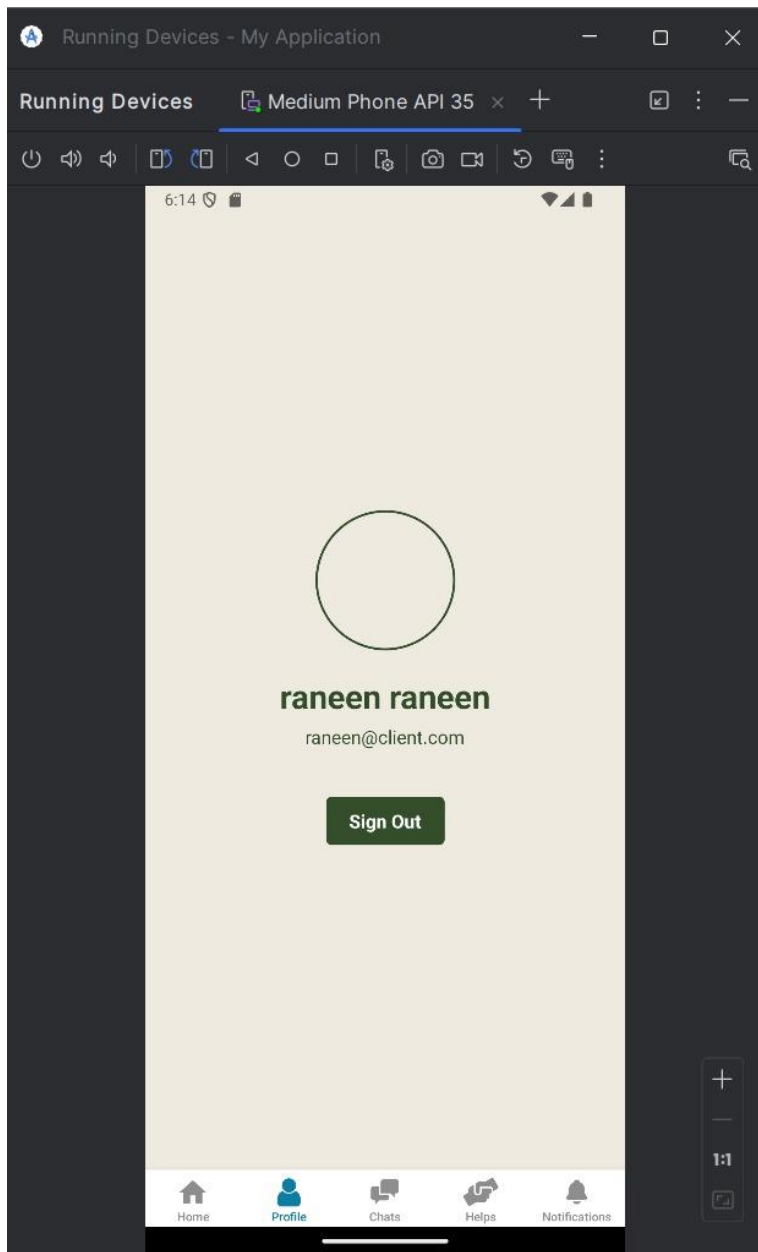
Notifications

Log in as doner



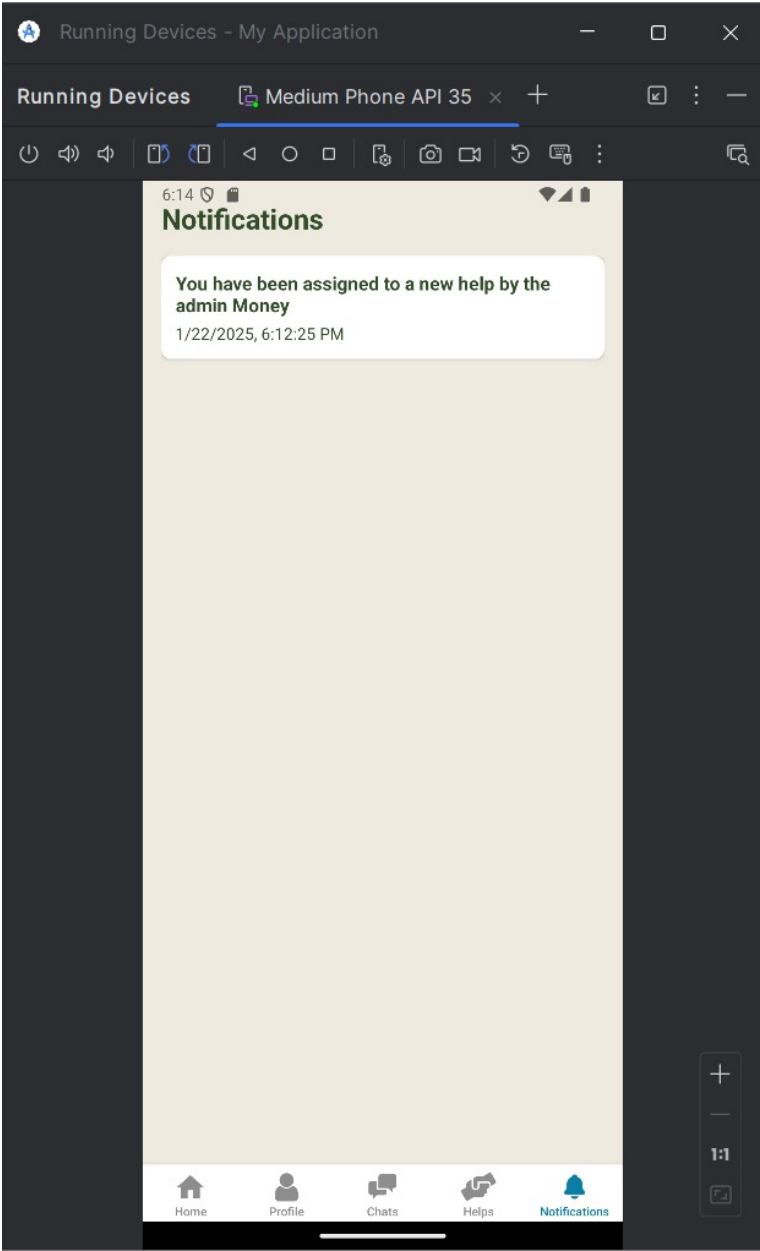


Log in as user (needy)

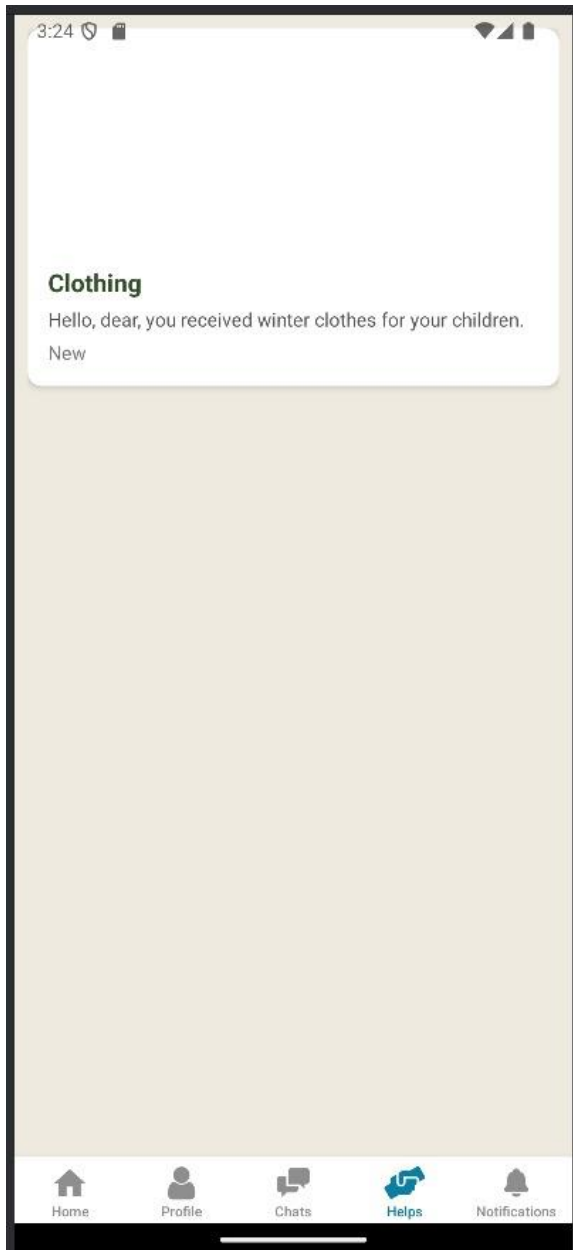


The helps arrive to the user

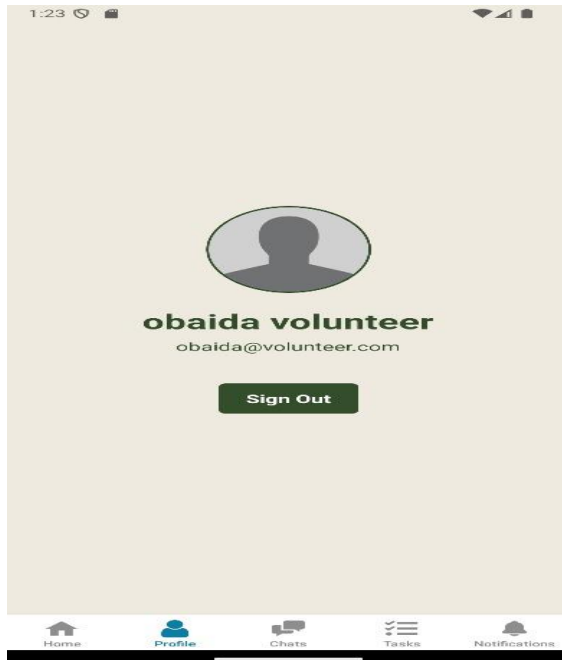
Notification :



It appears on the Help page:



Log in as volunteer:



Notifications reach the volunteer when new tasks are available, in addition to displaying them on the Tasks page

7:03

Notifications

**You have been assigned a new task with title
PENDING**

1/22/2025, 7:02:58 PM

**Your Task Status Has been updated to
IN_PROGRESS**

1/22/2025, 7:03:33 PM



Home



Profile



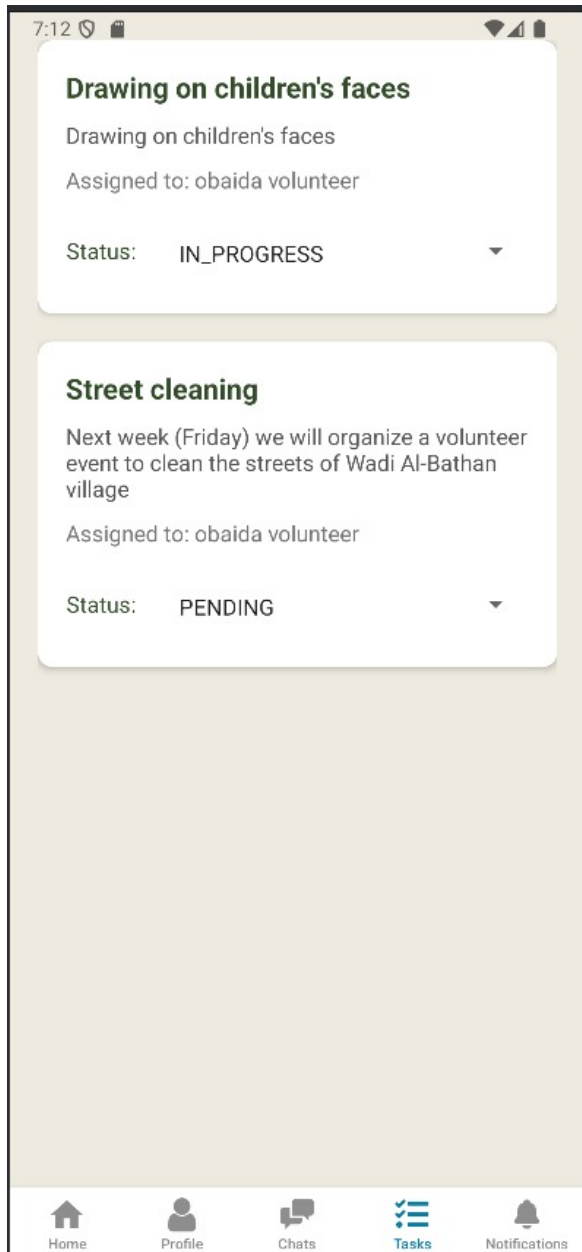
Chats



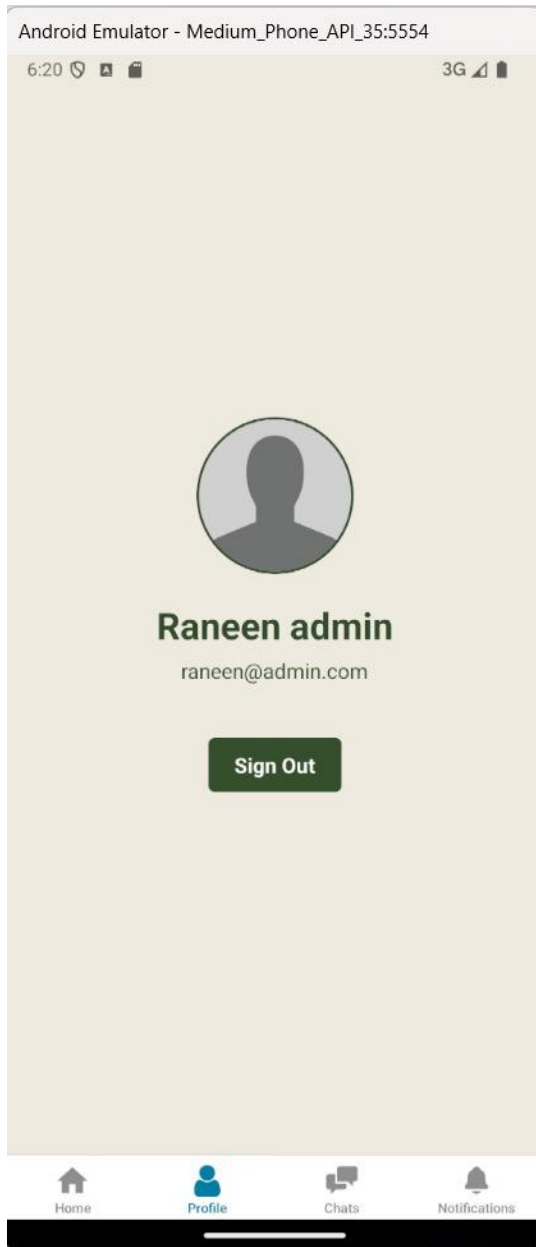
Tasks



Notifications

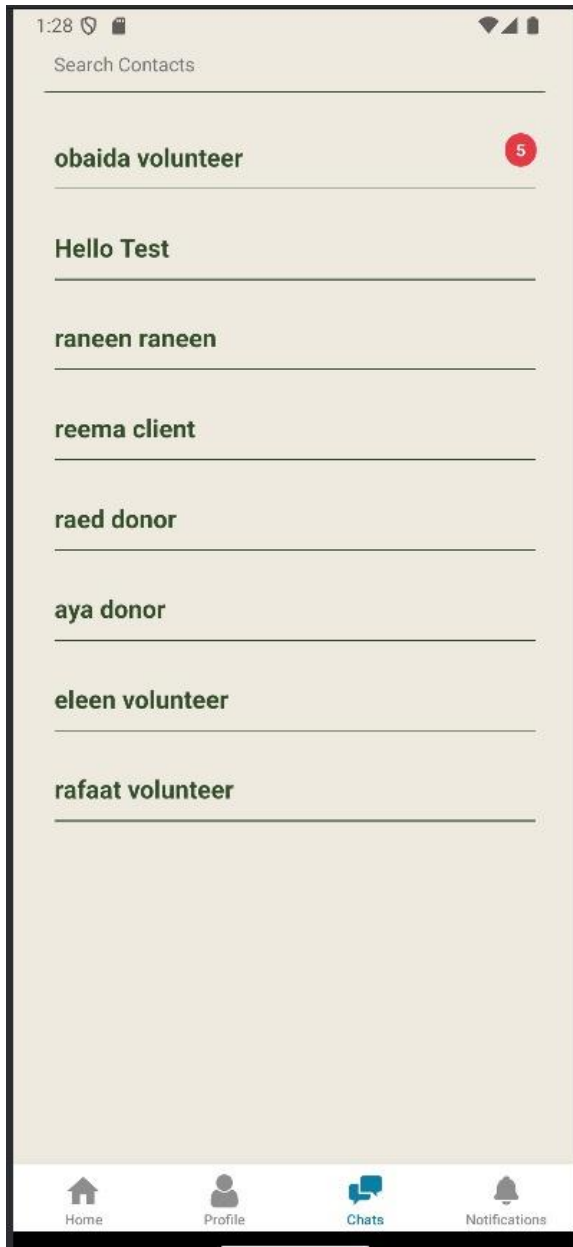


Log in as admin:

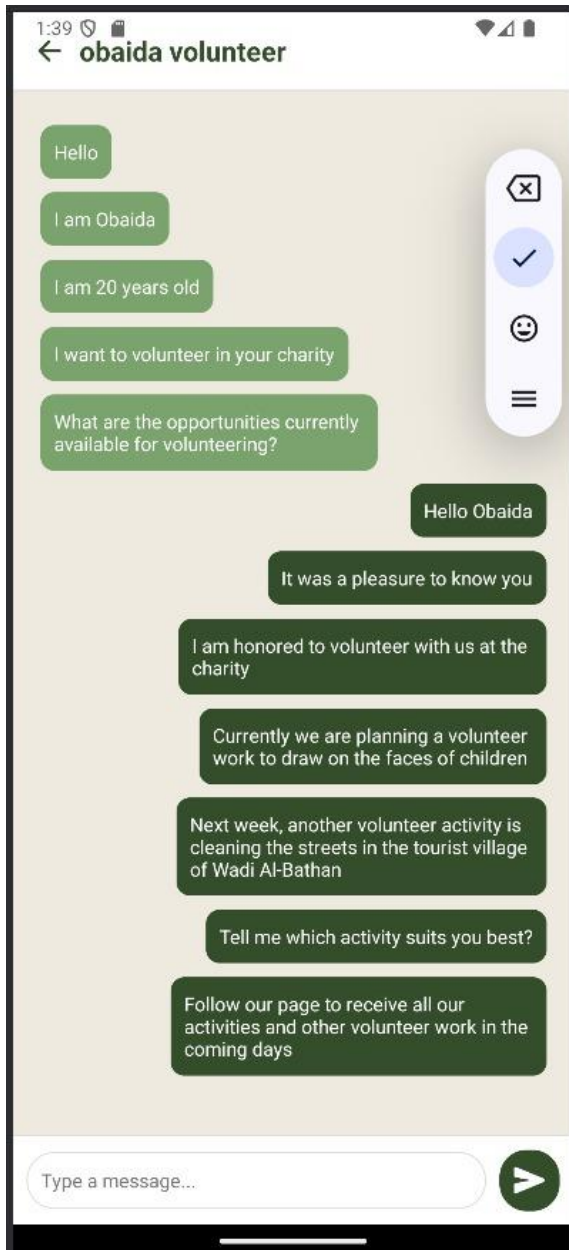


There is a chat between the admin and each of the users, volunteers, donors, and those in need (the admin can communicate with everyone, and each of them can communicate with the admin only)

The admin account shows everyone who has an account on the site so they can communicate with them



Chat between obaida volunteer and admin :



Chat between admin and client sahar:

7:16

← sahar client

Hi

I need winter clothes for my kids

Hello, dear

we seek to provide your needs as soon as possible

follow the notifications, we will keep in touch with you as soon as your request is available



Type a message...



CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Summary: A software project supports the work of a charitable association that provides aid and services to different groups of society, whether low-income, orphans, or people with special needs. This system targets the association's director, donors to the association, the people who benefit from it, and also its volunteers. We have proven that the computerized system facilitates transactions and also organizes The association's resources greatly increase the efficiency of its work

5.2 Future work

1. Choose techniques for scanning reports and documents submitted by those in need to ensure their authenticity
2. Raise the level of development of the conversations in the application so that we add features for uploading photos and videos in addition to deleting and searching
3. Providing the advantage of printing electronic volunteer certificates for volunteers in the association and sending them to them

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