

Kapra Eid






Group Number: 06

Group Name: Karachi Se Lahore

Group Representative: Omer Shakeel (21100193@lums.edu.pk)

Project Phase: Phase 2 - Design

Contribution of Individuals

Name	Contribution statement	Picture
Zoha Salman	<ol style="list-style-type: none"> 1. Conducted the brainstorming session 2. Wrote the brain storming part of the document 3. Wrote the draft and pictures of brainstorming 4. Helped in writing the design alternative section 5. Helped in writing the final design section 6. Made the low-fi together with Mustafa on Balsamiq 7. Recorded and made the low-fi flow video 8. Made the first 4 screens of hi-fi: Welcome screens, Login and Sign Up 9. Wrote the low-fi part of the document 10. Gave ideas for scenarios 11. Made the designs for the hi-fi 12. Wrote the hi-fi part of the document 	
Mustafa Asif	<ol style="list-style-type: none"> 1. Helped in conducting the brainstorming session on Mural 2. Helped in writing the design alternatives 3. Helped in writing the final design section 4. Helped in making the lo-fi designs in Balsamiq 5. Helped in writing the lo-fi part of the document 6. Helped in making the hi-fi designs 7. Gave ideas for the scenarios 8. Made the paper prototype and tested it with two users. 9. Made the designs for the hi-fi 10. Wrote the hi-fi part of the document 	
Omer Shakeel	<ol style="list-style-type: none"> 1. Helped in writing the findings for lo-fi prototype testing with Harris 2. Wrote the scenarios 3. Wrote the literature review + existing work with Harris 4. Wrote the problem description (picked from previous document) 5. Helped in making initial version of hi-fi design 6. Was part of brainstorming session on Mural 	
Name		

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| Muhammad Hariss | <ol style="list-style-type: none"> 1. Made the complete donor side lo-fi on paper 2. Conducted paper prototype testing with two users. 3. Analyzed the findings of paper prototype testing. 4. Wrote the literature review with Omer. 5. Made the sketches |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



Name

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| Muhammad Shayan Hasan Irfan Khan | <ol style="list-style-type: none"> 1. Helped in writing and editing the scenarios. 2. Made the corresponding storyboards to go with them. 3. Helped in making of hi-fi design. 4. Helped in the brainstorming session on Mural. |
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1. Problem statement (The Final One)

91.5% of people filling our survey claimed to possess clothes that they no longer require; yet only 9.2% said they donated them through organizations. While our goal remains the same, which is to address this gap in clothing donation from organizations, our research allows us to view the problems in new light and have a more informed opinion about the situation at hand. A thorough study of the stance that potential donors hold with regards to donating to organizations reveals that many of them see the situation similarly and face the same barriers. Broadly speaking, they can be attributed to their own personal preferences and lack of service on part of organizations. While it is valid that people prefer to donate to acquaintances, their reluctance to donate to an unknown community through a third party, however needy it might be, deprives said community of a basic right. These trust issues stem from lack of transparency about the process from the organizations. While people have divided opinion about the degree of anonymity that needs to be preserved between the donors and recipients, a large majority agrees that some more information can be provided to the donors and it would lead to greater willingness on their part to donate. Similarly, the donor's abstinence from donating because they would rather wait for someone they know and their attachment with clothes that they do not use stands in the way of a constant supply to people who are in much greater need and should be addressed through greater emotional appeal because it is undeniable that deep down, most of these people care about helping others out with the resources that are available to them. This was

demonstrated when a lot of them mentioned that their reasons for considering distribution of clothes is self-satisfaction, sympathy with the less privileged and the thought of being answerable to God. Besides trust problems and personal preferences, an overwhelming majority of people mentioned that donation was inconvenient for them and no real infrastructure existed for them to donate at ease from their homes. A genuine lack of service coupled with unawareness about the existing services is preventing a large group of people from benefitting society and it will be the central aim of our project to provide this awareness as well as cater to the demands that people have with regards to level of service that should be provided.

2. Brainstorming (process and ideas) - 5%

Due to the COVID-19 situation, our brain storming sessions were carried out over zoom and Mural (Brainstorming web tool). We divided our session into three stages: themes, highlighting the key features of the application and their corresponding feasibility and importance. The purpose of these timed sessions was to enhance the creativity of the group members and to ensure that there was no overthinking. The idea behind the brainstorming session was to ensure everyone's views were considered and a common ground was established.

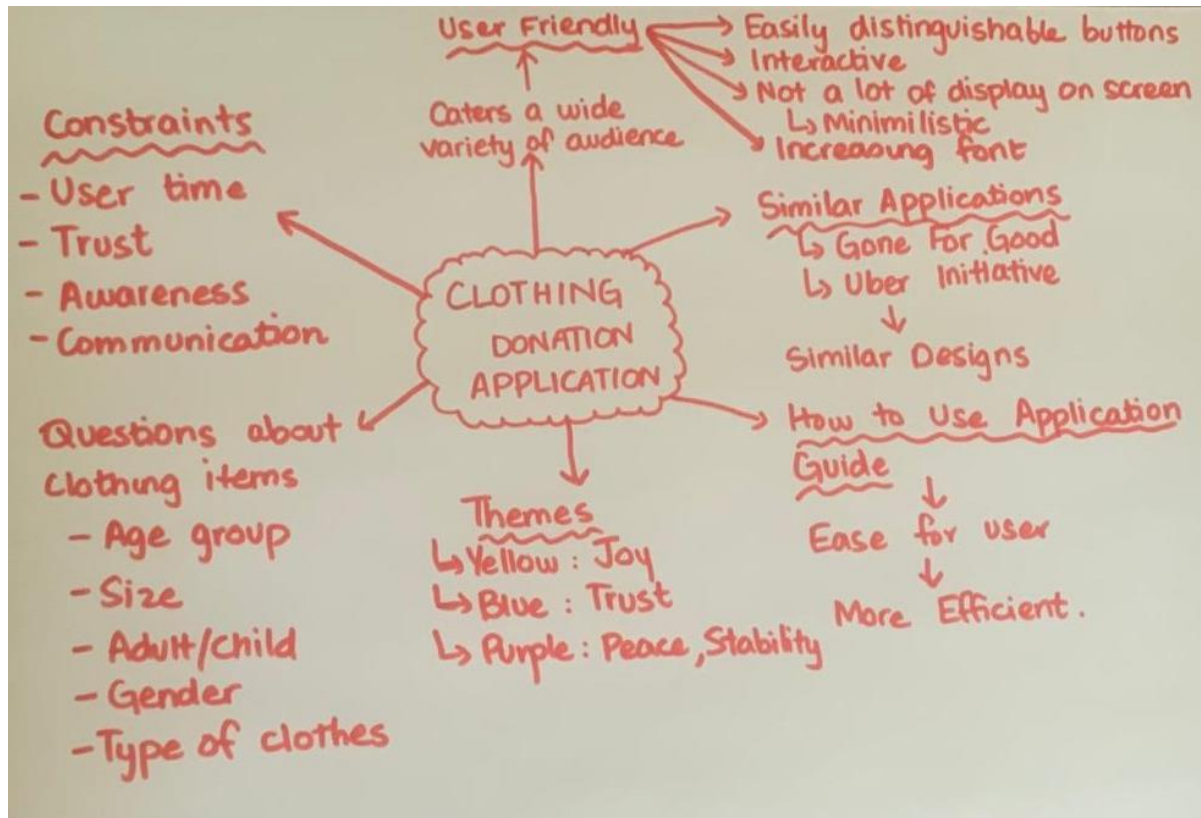
Themes:

We first analyzed the findings from the user research document and determined what the target users of the application (donors and organizations) wanted in the application. We discussed the themes of our application as a group on zoom and it was an introductory session which laid the foundation for the future design work. The themes we identified are as follows:

- The donation process is already a very hectic process for the user, if we want to ensure that it is convenient, we have to make it user friendly so that a wide variety of audience will be able to use the application. There have been a few applications in the past such as Gone for Good, Uber initiative and these designs have ensured simplicity of the user and convenience. Therefore, it is important for the design to be simplistic.
 - Easily distinguishable buttons
 - Interactive design
 - Minimalistic- Not a lot of display on screen
 - Increasing font for readability
- The user needs to have a smooth transition into the application with a demo or tutorial so that the user is aware of the entire donation process. Therefore, the gulf of execution needs to be minimized by having an application guide to ensure the process is even more efficient.

- There are various questions that need to be answered about the clothes that are being donated by the potential donors. These questions include the size of the clothes, age group of the donors, gender and type of clothes. Too many questions can frustrate the user and the aim of the application would be destroyed. It is very important to ensure that a balance between the questions is reached so that the process of donation is not hectic.
- There are various constraints in the current donation process as highlighted by the findings from the user research document. The application should be such that it caters these user constraints in a way that their feasibility and importance are consistent. The various constraints of the user are as follows:
 - The potential donors do not have much time from their busy lives for donation of clothes. To make this process easier, we must ensure the time taken for the entire process is minimal.
 - The potential donors do not trust many of these organizations. Therefore, there has to be a feedback process so that the users can observe that the clothes that they have been donating are going to the right people.
 - The potential donors are not aware of the different organizations and their aims. Some of them also do not know about these organizations at all which forces them to donate to those they observe in their day-to-day life. Therefore, it is important that they are aware about the initiatives of the different organizations to build trust and awareness.
 - The communication gap between the donors and the organizations have led to many unanswered questions for the potential donors. This eventually stops the donors from donating to the organization in the future. To minimize this there should be transparency in the donation process and a chat box so that the donors can contact the organizations in case of queries.
- The themes of the application should be kept consistent with our application. The ideas for the different themes of our application include:
 - Yellow: Joy
 - Purple: Peace and stability
 - Blue: Trust

This process enabled us to identify the features of our application more clearly. We highlighted the main themes of our application so we could build the features in the next stage of the brain storming session and this would ensure greater productivity. Therefore, it was very useful as we used a group collaboration to ensure we were heading in the right direction.



Features:

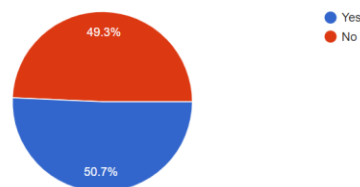
We build up on the themes that we had laid down for our design, by identifying the different features of our application on mural. This was conducted individually and there was a time limit set up so each member of the group could use their post its to virtually write anything that comes in their mind. The ideas that came through the session were then arranged and common ideas were put together. This enabled everyone to think individually and contribute to the design process of the application. The important features of the application identified are as follows:

- The first feature that is important is the detail of the clothing items that are being donated by the user. The user could be asked to take pictures, add description of clothing items and choose clothing categories. This would ensure that the organization knows the condition and the aspects of the clothes and if they even needed those clothes while they were distributing. This essentially ensures that the clothes that are donated by the user are eventually used by the organization and are not dumped by them while they are sorting.
- To login and sign up should be kept convenient as that is one of the major themes of our application. To ensure this there should be a google and Facebook sign in option available. The sign up could also cater to the user demographics such as age and gender to get the statistics for the clothes they donate later. Furthermore, the two target user groups-potential donors

and application- should be redirected to different pages. This enables the user to view the different organizations they could donate to and the organization to track their donation progress.

- Through the user research phase, we observed the concern to maintain anonymity for both the organization and the potential donors. This was done to ensure that the feelings of both the recipients and the donors do not get hurt and the process is respectful. The organizations could give the area that the donations are contributing to, so the potential donors know the place they have donated their clothes.
- The reviews and ratings of the different organizations are very important to build the trust between the donor and the organization. The donors could read up the profile of the organization and the anonymous ratings and review would ensure transparency in the entire system. There could be quotes to motivate the users for donating more clothes to the organizations and the organizations could post the stories of the organizations to provide social proof.
- To ensure convenience for the user, the application would provide door to door services. However, there would be pickup charges because of this service and the organizations would not be willing to pay for these pickup charges. Therefore, these charges must be provided by the donor and they could choose the delivery method they want to use. Through our user research survey, we can conclude that the user stance for these delivery charges are neutral as shown by the picture attached below.

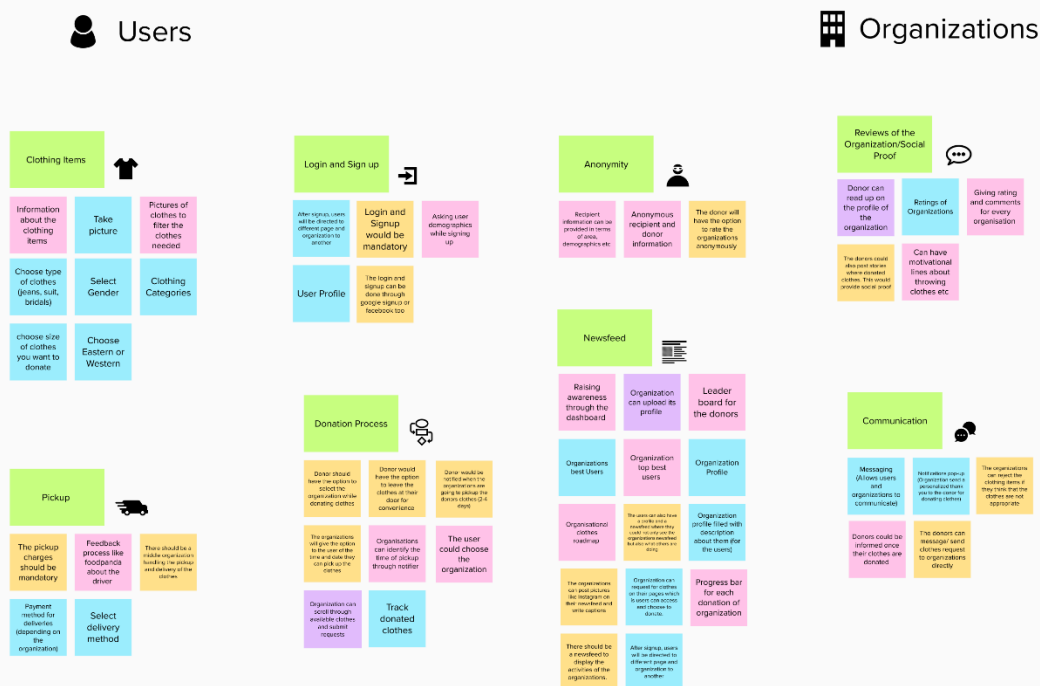
Would you be willing to pay delivery charges for a pickup service?
140 responses



- To build trust and increase awareness of the different organizations that exist, a dashboard could display the organizations and their purposes. The organization could upload their profile and display a roadmap of the clothes they need to complete their donation drive. The organizations could also upload pictures of past drives and display current activities with progress bars to ensure the users are aware of the different drives they are conducting and can trust them in the donation process.

- Communication between the donor and the organization is very important. There could be live messaging and contact numbers so the users can contact the organization whenever they want to know more about them, or they have any queries about the process.
- Donors could track their donated clothes in real time and could give a pickup time to the organizations. Also, during these trying times it is important to have minimum contact between the rider and the donor. Therefore, there could be an option to leave the clothes at the doorstep at the time of collection. The donors could be notified when the organization would be coming to collect the clothes so they can pack the clothes before they arrive.

Features:

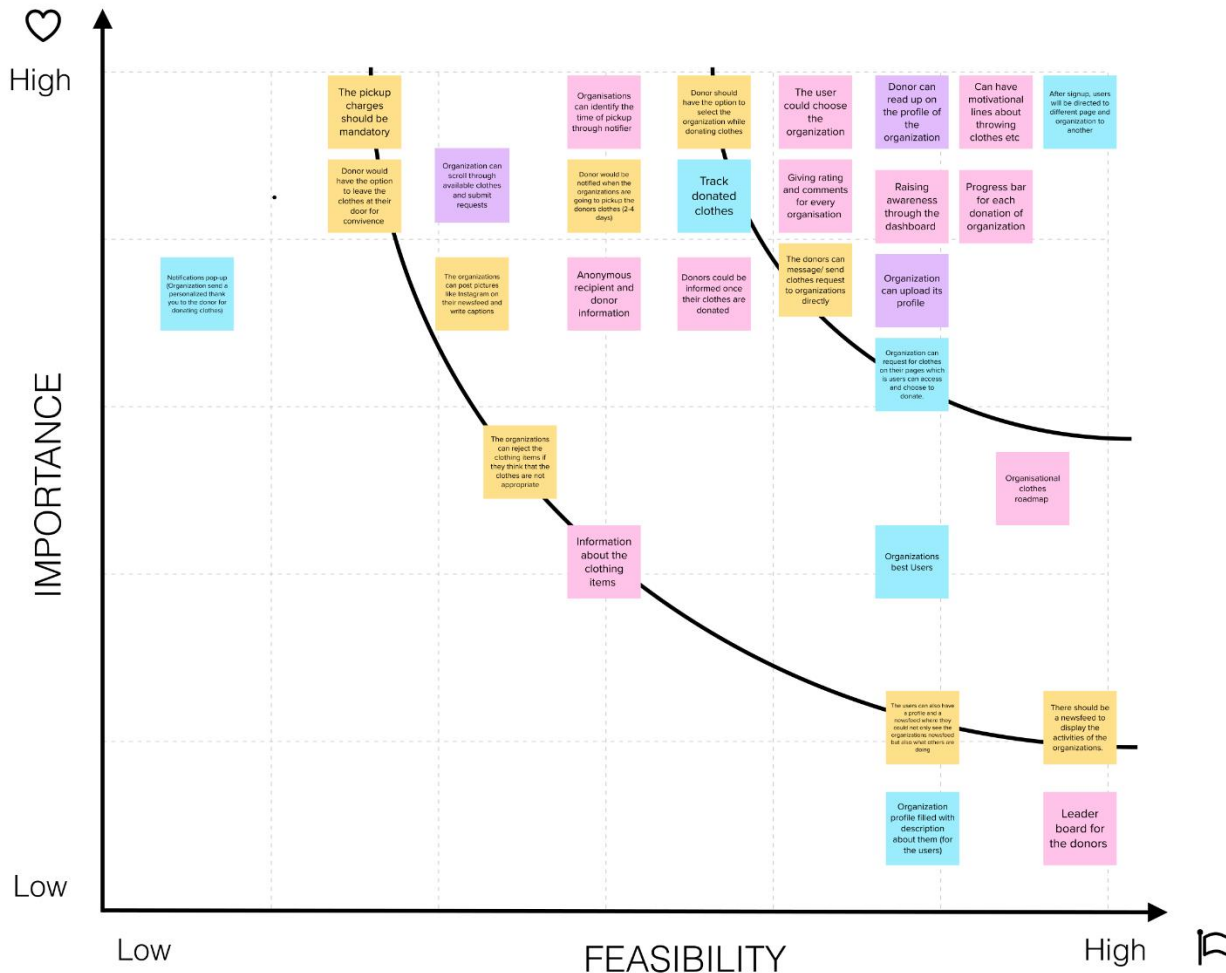


Feasibility Vs Importance of features:

Once we had identified the important features of our application, we arranged them according to their feasibility vs importance. This was done as a collaborative effort of the group and we filtered the ideas through the brainstorming session into its importance and feasibility in terms of the application provided the restraints. This enabled us to identify the importance of each of the features so we could

reach a final design. This was done on mural and the graph of feasibility vs importance is attached below

Idea Prioritization



This methodology in the brainstorming enabled us to get a better idea of the design and we reached a common ground which enabled us to identify the themes and features of the application. These features were then categorized according to the importance and feasibility of each of them for the later stages of design.

3. Design Alternatives - 10%

Design 1

This design was kept minimalistic to ensure that the application could be used by a wide variety of age groups. The process of donation does not involve any material gains, so individuals do not want to spend a lot of time on the application and therefore, this design deals with a simplistic view of the entire process. There are not many features in this design to keep the learning curve minimal and focus on speeding the donation process for greater donations.

Themes:

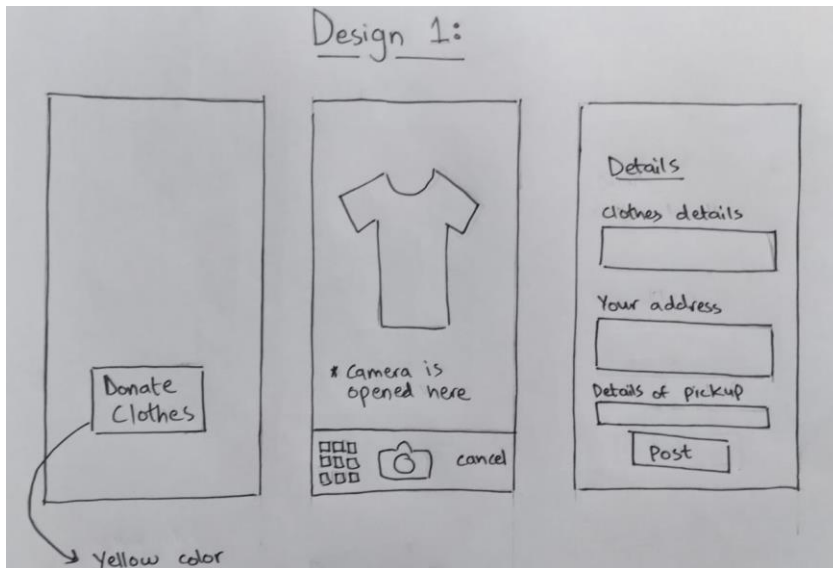
A yellow and white theme would suit the purpose we are trying to achieve. Yellow is the color of sunshine and it produces a warming affect, arouses cheerfulness, and is used to evoke pleasant emotions. Furthermore, the font could be kept large so that the display is easily visible and identifiable by the users. The questions about the clothing items would be minimum and the user would be asked to upload pictures of the clothes they are donating.

Features:*Donors*

The user would not need to enter too many details and could click the donation button and upload a picture and a short description about the item and a random organization would be assigned to the user according to the description of the clothes. The user can then enter details of pickup such as address and time. This process would take a few minutes and does not require a lot of information input from the donor's perspective. The organization could then accept the request or cancel it in real time.

Organization

The organization could enter the credentials provided to them at the time of contract. They could then view the donations that they are getting in real time and approve or reject the donations based on the description. The organizations cannot see the progress bar or donor applications. This would be a very basic application to ensure convenience.



Design 2:

This design was focused on the awareness of organizations and focused on building trust with other organizations. Our user research highlighted the importance of trust and awareness in the donation process therefore, this donation process would ensure the organizational work is highlighted. This design focuses on building an intimate and close relationship of the donors in the application and ensures the organization can manage the clothes donation process easily. Therefore, the design would demonstrate the past work of organizations and the purpose of the organization. This design would try to bring to light the work that the organizations are carrying out and the donors can contact the organizations if they have any questions.

Themes:

A purple theme would suit the trust and awareness theme we are trying to achieve. This color has a wide variety of effects on the mind and body. It calms down nerves and helps in encouraging creativity. It could be ideal for this design as we want the donors to break the chain of donating to their specific organizations and look at other equally good options.

Features:

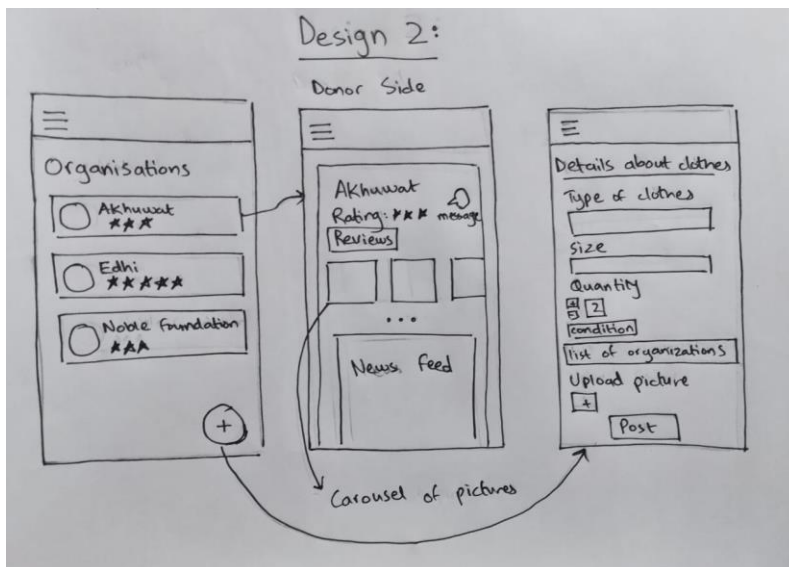
Donors

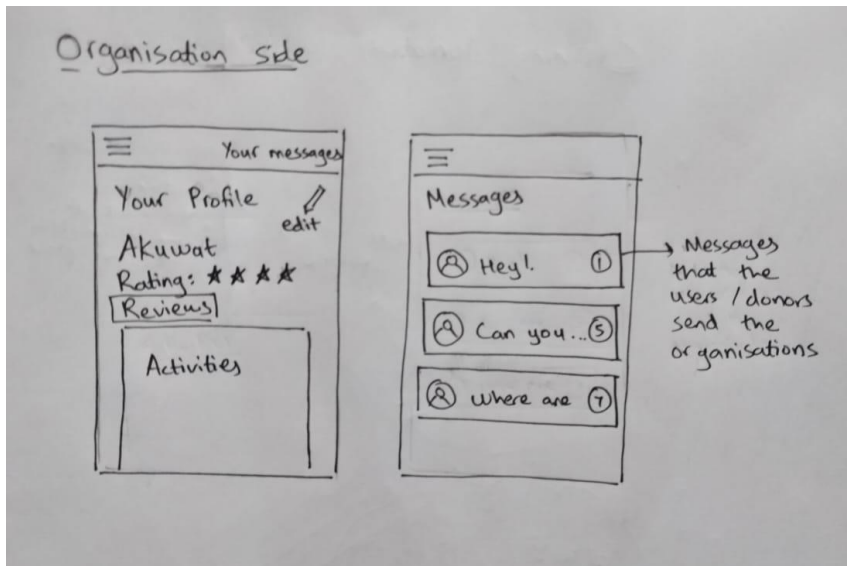
This application would have all the organizations listed on the homepage. The donor can navigate to each of the organizations' homepage and check their reviews. These organizations can update and add posts as well as stories to ensure the user knows the process of donation at the backend. The users can choose the organization they want to donate to through the organizations homepage and can message

the organization if they want to learn more about them. The users would have to answer specific questions regarding the clothing items such as the size and condition of each of the clothing items. They will have to take pictures for all the clothing items and users would get regular notifications about the activities of the organizations they are subscribed to. The users could then enter pickup details and specify the delivery mode such as leaving at door or giving it to the rider. The donors could also rate and review the organizations anonymously after they have donated their clothing items.

Organizations

The organizations could view and edit the homepage and could view the images and details of each of the clothing items that the users want to donate to them. This would enable them to filter out the clothes they no longer need, and they would also have a chat box so they can chat with user if they have any questions. The organizations could view the anonymous ratings and reviews to evaluate their progress.





Design 3:

This design would be organization centered and the donors could view each organization and the clothing items they need. This would be followed by donors selecting the organization they want to donate to based on the clothing items they have available. This design would be very interactive as it would focus on the needs of the organization and recipients the donors would be donating to.

Themes:

We can employ a red and white theme to indicate urgency. Red is a very emotionally intense color and has very high visibility. It can be used to indicate that the organizations need clothes. The font can be large enough so that they are easily read by the users. The shadow of the buttons could be red, and the background would be white to demonstrate high visibility.

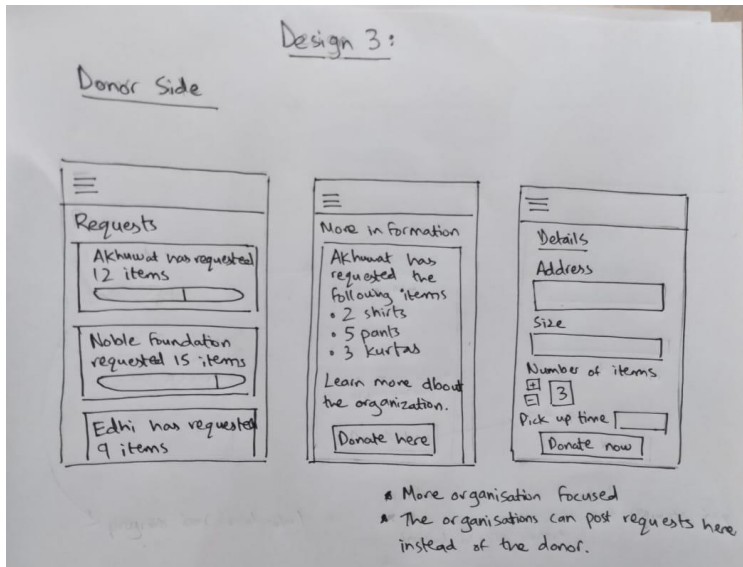
Features:

Potential Donors

The donors could login and view progress bar for each of the organization. The progress bar could indicate the number of clothes that are already donated and the number of clothes that are required. If the donor has the clothing item the organization needs, they could click on the request bar. They would then be prompted to a new page where they could enter the size and their location. The organizations could then pick up these clothes from the house based on the pickup time specified by the user.

Organization

The organizations would make progress bars depending on the needs of the recipients they would be donating to. They can monitor the progress of each of their donations in real-time and urge users to donate if they have a time constraint by enabling an alert sign on the side of the progress bar.



Design 1	Design 2	Design 3
⇒ Easy to Use Donors	⇒ Awareness/Trust Donors	⇒ Organizational Centric Donors
→ Large Font	→ Purple Theme	⇒ Progress bar
→ Yellow White	→ Messaging	⇒ Donate according to the Progress
↳ Minimilistic colour	feature → View homepage	⇒ Prompted for Size
→ Upload Picture and description	→ Choose organization	Organization
Organization	→ Choose pickup	⇒ Monitor progress bar in real time
→ Enter credentials	→ Clothing specific questions	⇒ Monitor their progress at real-time.
→ Real Time approve/reject	→ View/edit homepage	⇒ Urge by alert box
→ Can not see progress or donor names.	→ Messaging	
	→ Filter out through pictures and questions	

4. Literature Review/Other similar products < (± 500 words)> - 3%

A lot of work has gone into exploring donation through third party for clothes and other items alike and while the features of each project are different and tailored to suit the needs of the area as well as time they are developed in, there are points we can take inspiration from and include in our application or shortcomings that we can learn from.

Gone for good

This is a UK based charity pickup service. They collect goods ranging from electrical goods to furniture, clothing, and toys for free. One can donate to charities of his own choice for free by using gone for good application. On the homepage, there are terms and conditions at the bottom and two main options, Donate item(s) and Major property clearance. Terms and conditions entail the details of what they do and how they operate, and some terms of using the application and service. [3] This application has a vibrant and convenient design and a catchy user interface but its defining feature and what makes it stand out its distinct options for single item donating (Donate item(s)) and bulk donating. Each has its own set of protocols. The point is that those bulk donating do not have to fill in too much details for so many items as it is not

Foodshare

This was an application that became part of the research community but did not reach the industry [5]. It was similar to our idea. It was based on a pickup service for food donations. The application was meant to be used by three sets of users: Restaurants, Individuals and Organizations. Restaurants and individuals would use it to donate food whereas organizations would be the recipients. For signup, it would require basic information from the users and some additional information from restaurants and organizations. To make a food availability post, restaurants and individuals would have to login their account first. Then they would have to choose the designated option, which would open their camera and ask them to take a picture of the food they want to donate. The next step would be to provide some information about the food: item name, quantity etc. Afterwards, they would be asked to specify pickup time and location and post. Once the post is made, it would be visible on the Organization's newsfeed.

For organizations to request pickup, they would have to login first. Then, they can select the post from their newsfeed and request pickup. Upon requesting, the potential donor would be notified about the request and he would be asked for confirmation. Once the request is confirmed, the organization can pick-up from the donor's location and distribute to hungry people. After distributing the food, organizations are required to make a distribution post, which will be shown in the newsfeed of both the parties.

"Givit"

This is an online charity based in Australia that aims to act as a mediator between organizations, donors and the needy. [4] Their primary platform is their website. The website has features that provide a lot of detail with regards to what items are required and who requires them. Anyone willing to donate will first scroll through a list of items, select the relevant one and see a list of people/families in need of the items with brief information provided about their story and condition, which are uploaded by the organizations. Furthermore, it facilitates pick-up and drop-off as well as all different kinds of exchange of items and cash, depending on the preference of relevant parties. All in all, their website is built to be comprehensive as well as to personalize the process in order to alleviate trust problems and better satisfy donors.

The design of the website is image-focused for greater emotional appeal; the first thing on the homepage is two hands joined to hold a heart to signify the importance of looking out for each other. Furthermore, it displays stats in very large font to communicate the urgency and need of donation to

anyone who visits the website. The color scheme is consistent throughout division of sections that helps break down the features and makes navigation easier.

reGAIN

This is another mobile application that deals solely with the donation of clothes. reGAIN is built on a reward-based principle, providing donors with discounted coupons to various shopping stores. [6] In addition to this, they center their appeal around the negative environment effect of throwing away clothes, their promise being a simple one: that the clothes people donate will help make the world cleaner and raise money for charity simultaneously. They combine with British Red Cross to provide convenient delivery service and give the user an option to select a drop off point close to their house after packing the parcel they wish to dispose. Once the process is complete, the user gets access to the discount coupons and reGAIN handles the rest of the work.

The design of the application is minimalistic but greatly effective; it consists of only 4 screens and 3 colors throughout with large font and icons, which make it clear as well as easy to use. The homepage consists of a list of coupons, which serve to best incentivize a first time (or old) user of the mobile application. From the drawer the user can access a video, which discusses the principle of the application and appeals to the users. All in all, the application attempts to make it a convenient experience for any user.

5. The final design – 20%

After conducting extensive user research, we concluded that when giving away clothes, individuals choose between handing them directly to someone or donating them to organizations that collect these clothes and distribute them on their own. This is influenced by various factors as in some cases people tend to prefer that these clothes end up with someone they are acquainted to. It is undeniable that a lack of knowhow about organizations and the processes that they offer plays a role. This lack of awareness among people about organizations means people who want to donate have limited access to such organizations. As a result, they prefer the other methods of giving away or discharging the same clothes that they would have otherwise given to organizations. KapraEid is one such application which aims to bridge this gap by developing a platform which could provide an efficient communication between the organizations and donors, which could, in turn, help boost people's confidence in these organizations. The problems highlighted by the targeted user and the corresponding solutions that have been promoted through our application are as follows:

Promoting understanding of existing organizations

One of the leading concerns of the target users of our application arises from the lack of awareness about the existing organizations that handle the donation of clothes. During our user research phase, some interviewees had stated that they had never heard of such organizations and those who were aware about these organizations did not have sufficient information about the procedure observed by these organizations, which why they abstain from donating. The potential donors were interested to learn more about the organizations but were unsatisfied with the resources currently available to acquire relevant knowledge. To build this gap between the organization and the donor, several features have been added in the application:

Providing description about the organization

To ensure the users are aware about the motive of the organization, the application provides various organizations that the user can choose from according to their preferences and needs. Since the targeted audience wanted the ability to choose between the organizations, this freedom has been provided to them. After logging into the application, the user can view the various organizations and the motives behind their donation. They could click the organization they want to know more about, and that would direct them towards the information, motives and pictures of the organizations. The organizations on the other hand can write and edit their descriptions, pictures so the users know more about them, how they could contact them, how they could help in their program and they could determine the organization that is the best fit for them. This realization would build the trust between both the parties and the organizations could also upload pictures that the users can view. Since building trust and encouraging awareness is the most important feature of the application, this would be the homepage of the application.

Indicating the past drives conducted by the organization through posts

The organizations that have already conducted several drives are aware about the donation procedure. However, the donors who would be donating for the first time to an organization would have trouble trusting the organization unless social proof is provided. This social proof would be provided through various drives that they have previously conducted and the results of those donation drives. Looking at images and posts from past donation drives, it would appeal to the donor's emotions and they would be encouraged to donate even more items as they would know their donation would make a difference. The organizations could add the donation drives they have conducted along with a short caption about the drive and the donors could then like the posts that have been uploaded by the organizations to support the organizations in their cause. Upon appreciation from other donors, the organizations would be more motivated to upload posts as evidence of the drives they had conducted which would in turn motivate those donors who have donated clothes to these clothing drives.

Ratings and reviews for the organization

While conducting the user research study, potential donors added that they were more likely to trust organizations when they heard about them from different individuals. Many of them also stated that they would check reviews on Facebook groups when choosing the organization, they wanted to donate to. Therefore, this feature would enable them to choose reliable organizations and build trust. To implement this in our application, the donors would be presented a rating/review pop up once they have donated their clothing items. They could then either rate the organization anonymously, based on the user requirements in the research phase, or add their name alongside the rating and review. The review field would be optional to keep the design

simplistic and easy to use. The organizations can view the ratings and reviews a donor has added to their page for a constructive feedback so they can improve their process and ensure they build trust with the user.

Contribution of Donors

Our user research phase revealed that a major hindrance that prevented people from donating to organizations was the lack of information provided by the organizations about where the donations went. People wanted to know if their clothes are being utilized or they are being thrown away. Some people wanted to know the names and pictures of the recipients while some just wanted to be satisfied that their donation went in the right hands. They would be satisfied if a friend or a person they trusted worked in the organization or they knew of the whole process that the organizations employed. Keeping track of every clothing item would be extremely difficult for the organization and would be an additional burden on them. The organizations representatives would have to make a customized response for every donor. Furthermore, the recipients were not comfortable in giving out their information or being photographed. This clash of interest led us to come up with features that could be a common ground for everyone. The features have been explained below

Donation drives

If an organization wants clothes for a certain area, they could post a new request. They would be required to enter the name, ending date and the description of the drive. The donation drive would then be posted on the donor's home screen. They donor would be displayed a list of all the drives that are being conducted and the place it is being carried out. The organizations name, the time remaining, and the clothes donated to the specific drive would be displayed on the home page. The donor would have the liberty to choose any drive they want, and they could be shown extra information about it. The donors would be satisfied to know where the clothes are going to and at the same time it would reduce the organizations hassle of telling every donor about their specific donation area. This would ensure the anonymity is preserved and the recipient's information is not being giving out to the public. Furthermore, the drives that are getting less attention would be placed in front so that it increases visibility, and they are given a higher priority. This would enable the new organizations to be in the limelight and help them establish themselves as well.

Donate now

People usually had clothes lying around but they don't want to go through the inconvenience of looking around the donation drives and choosing from them as some of them don't really care about which area the clothes are being donated. They want to get rid of the clothes as soon as possible. Furthermore, some donors have established a brand loyalty to an organization and do not want to donate to any other organization. If their specific organization has not posted about any donation drive, then they could go to the organizations profile and donate directly to them instead. This feature in put in place as some people find it very difficult to donate to all the organizations and want to be certain that their donations are helping the community.

Procedure for Donation

The participants in our study highlighted the problems they faced in the current donation procedure, which resulted in them donating clothes directly to individuals that needed them. These participants were very eager

to help those that were deserving but they failed to donate them because they found it hard to take out time from their lives to go through the process of donating clothes. They complained that packing clothes, providing details, and following the donation procedure requires a lot of effort as too much information needs to be provided which makes the entire procedure even more complicated and inconvenient for the potential donors. To make this process more convenient for the organization and the donor, few features of the application include:

Login through Facebook or Google

The first-time experience of an application is a crucial part of the application and defines how the user proceeds further with the application. If a login or signup process is too complicated it severely damages the users experience and there is a high probability that the users might delete the application. A mandatory sign in before using an app is a common source of friction for the users and the resulting number of users who abandon the registration process is significantly higher if their first time use of the application has been inconvenient. For this purpose, the sign in screen has an option to sign in using google and Facebook, since most users of the application use these applications in their daily lives, they could login without adding additional details about them through the sign in process. A study conducted by App Iterate, a mobile marketing automation platform for native mobile applications, reveals that the 68% of all the respondents of the survey said that complex registration was one of the major reasons behind finding an application inconvenient [1]. By having a simple login process, the user would not be discouraged in the initial stage and would smoothly proceed further into the application.

However, some individuals are hesitant in connecting their social media account with other application (19% suggested forced social Logins to be a reason for uninstalling applications). In order to cater to their desires, a signup feature is kept in the application. The signup process of the application is straightforward with only requiring the user to fill his name, email and password. In order to provide a layer of security, the account must be verified through their original email address that they provided ensuring that their email address is in fact in their own use.

Providing minimal description for the clothing items

Since the potential donors do not receive any material gains while donating clothes, the process should not be overly complicated. Keeping this in mind, the donation of clothing items is kept very simple for the targeted audience. The user needs to take a picture including all the clothes he/she will be donating to the organization at that time. The picture can either be taken through the devices camera or it could be chosen from the device's gallery. After uploading the picture, the user needs to specify the clothing items he/she will be donating and can chose to write an optional description about the clothes. The picture and the description could help the organization in understanding the condition and the type of clothes the user would be donating before the pickup. Since the organizations expressed concern over the usability of some of the clothes the users have donated previously, this feature is targeted towards ensuring that the right amount of information is asked from the user, so they do not get frustrated while donating to their items.

Integrating google maps while providing location

The address of the pickup needs to be specified for the donation procedure to be completed and keeping the convenience of the user in mind, the application could auto-detect the user's current location and ask the user to confirm that they want to get a pickup on the same location. The user also has the option to add their location in case they want to get the clothing donation pickup from another location. This integration is very common in most of the applications that have a pickup or delivery process and therefore, would have a minimum learning curve for the functionality of the application.

Indicating a step-by-step procedure for the donation

The convenience for the user can be further highlighted from the fact that the users can view a step-by-step donation process just like when they are going to go donate clothes themselves. Since the donation procedure contains a lot of steps and actions that need to be performed from the user's side, the tasks are divided into subtasks. Breaking tasks into different chunks and providing a feedback map for the donation procedure ensures there is minimum complexity for the user at one time. This enables the users to connect with the application and since the steps are logically connected to each other, the user can proceed easily through them. This ensures that first time users who do not have much time for the process of donation can connect with the application and identify the various tasks they need to perform for donation along with the time taken for the entire procedure.

Adding contactless pickup

Keeping the pandemic in consideration, we want to minimize the contact for both the organization and the donor. Therefore, more facilities are offered to the user to ensure they do not find the process to be painstaking. If the user clicks on a contactless pickup, the donor could leave the items at their doorstep according to the time they have specified, and the rider would collect it and send a confirmation message to the potential donors.

Cashless payment

In order to make the payment of the pickup service more convenient we allowed the user to pay through their credit card. They will have the option to save their credit card and use it for a later donation as well. This feature would be highly useful for people who opt for cashless pickup. They could pay through their credit card and leave their clothes outside their house. The rest of the pickup procedure would be handled by the organizations themselves.

Communication among the donor and organization

The lack of trust between the organization and the donor was a crucial area of concern for donors. They were not ready to easily rely on the organization's name and wanted to further talk to a representative or wanted to visit the place. To minimize the communication barrier between them we introduced a messaging and a story feature in our application.

Messaging

Having the ability to talk to an organization's representative promotes a feeling of security. The donors could

contact the organization and can have any query that they want to be answered rapidly. Donors could learn more about the organization's donation procedures. They could also contact them if a specific rider has delayed the pickup of clothes or is not finding the house location. In case of any unforeseen issue the organization could also contact the donor and inform them about the delay.

Stories

If an organization is carrying out a donation drive or they want to tell the donors how they are utilizing their resources, they can add images and a text on the images. These images could be posted as stories on the donor's side of the application and would be visible to the donors for 24 hours. These stories promote a feeling of good will as the donors can view who these clothes have been donated to. The donors could follow up on the stories learn more about the organization. By being familiarized with the organizations procedures the donor would be encouraged to donate more to these organizations in future.

Complete history of the user's donations

The user would want to know about the number of clothes they have donated, the drives they have contributed to, their current donation and their pending donations. All the activities would be displayed in their profile and they can easily navigate and check their history.

Current and Pending Donations

The user would have complete access to the successful and pending donations that they have offered. These would be displayed in his/her profile. If the user has offered donation to the organization and it has not been picked up by the organizations, it would be included in the pending section of his profile. However, if the rider has picked up the clothes and the organization is in possession of the clothes then it would be marked as a successful donation.

Clothing donation statistics

The organization can also benefit from the application if the application keeps the donations organized, highlighting the contributions that have been made so far and evaluating the progress that needs to be made so they could reach their targets.

Progress bar and charts

To help them monitor the progress they have made so far, and the time period that is left for the clothing donation drive to conclude, there is a progress bar along with the charts and graphs for each of the donation drive that the organizations are conducting. This ensures that everything is managed and organized in the application so the organization would know the success of the drive to help them improve based on the user feedback.

Simplistic and easy to use application

As the current process of donation is very inconvenient for the targeted users, the theme of the application is kept minimalistic and easy to use. In the user research phase of the design, we learned that the users desired to have an application that is easy to use even for first time users and they had a strong opinion to have a visually appealing display that displays all the required information in a concise and aesthetic way. Keeping the user

desires in mind, the interface of the application is consistent to the existing designs of popular applications like Food panda and Instagram, to ensure there is a minimum learning curve for the end users. Screens such as “Getting started”, “Login”, “Forgot Password” have become de facto standards in mobile applications. Since user familiarity with these screens are already high, they won’t require additional information and prior experience to work with these applications.

Additionally, to ensure that the user is not overwhelmed by the various features of our application, we used the technique of progressive disclosure. To ensure the users have a comfortable experience, the font size is kept at least 11 throughout the design and we have used the Roboto font family which is a standard for google android. A sense of assurance has been crucial to our application procedure, many of the donors felt that the organizations made no use of the clothes they donated to them and this was one of the reasons why they did not want to donate the clothes to them. Therefore, this build-up of trust between the donors and the organizations have been crucial for the functionality of our application. This build-up of trust, loyalty and confidence corresponds to the theme of our application: blue.

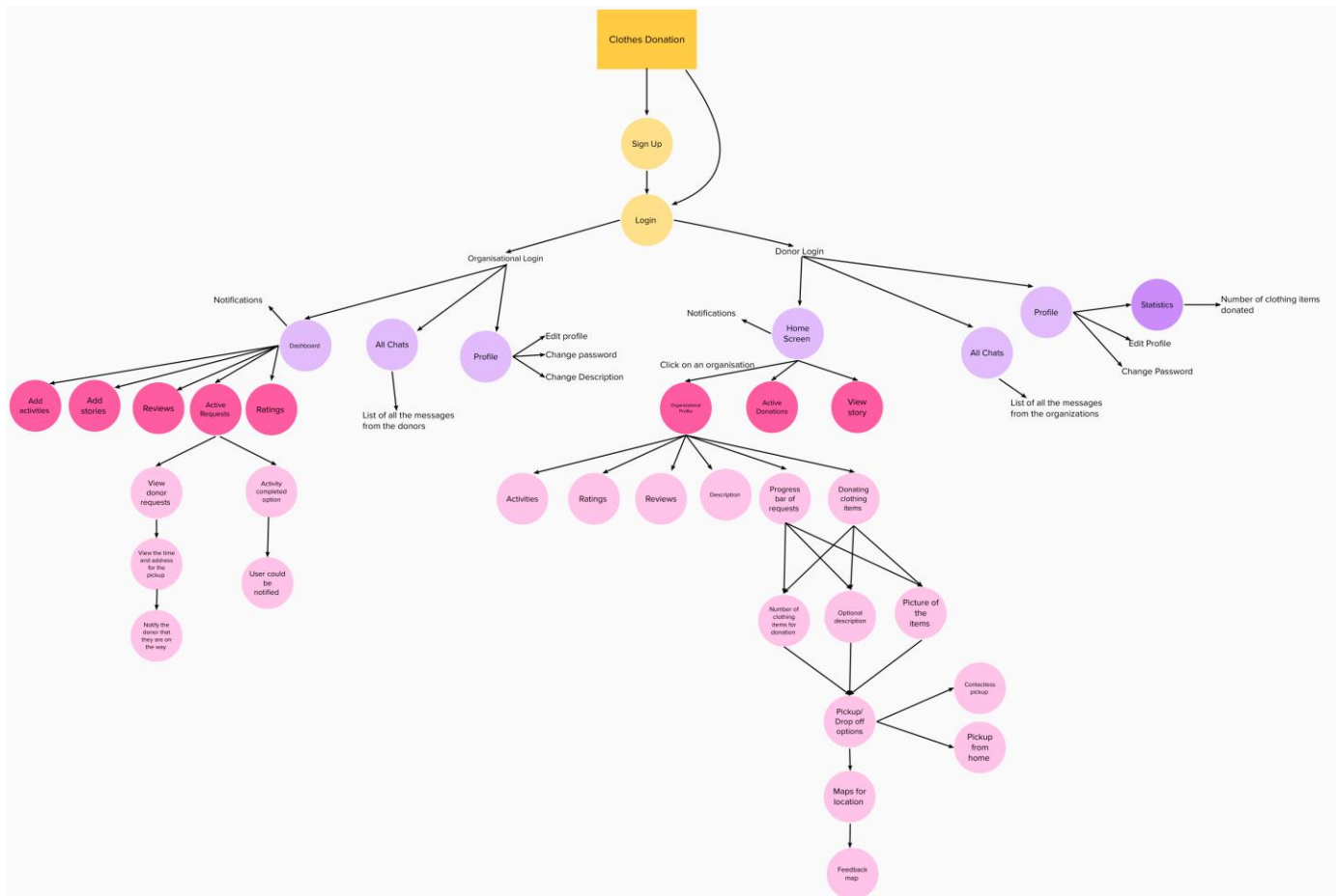
Helping those who help others is the high priority for our application, therefore it is very important to ensure that all the features of our application are accessible to the users. Since one of the major user needs is convenience, we have ensured that it does not take too much time and effort to discover the navigation of our application and so we have used the standard navigation patterns like the tab bar as users are familiar with these and would intuitively know how to move around the application. Priority levels are assigned to the common user tasks in our application and prominence is given in the design interface to connect the paths to the destinations depending on the frequency of use for the end users of the application. The screens are organized in a way that it requires the minimum number of taps, swipes and screens to keep the user convenience in mind. Tab bars are used throughout the screens to ensure that the visual consistency. The memory load for the user is kept minimum by making actions and available options visible to them. It is ensured that the navigation patterns are always available so if at any point the user wants to go to some other feature of the application, he/she can get access to it in a short time frame.

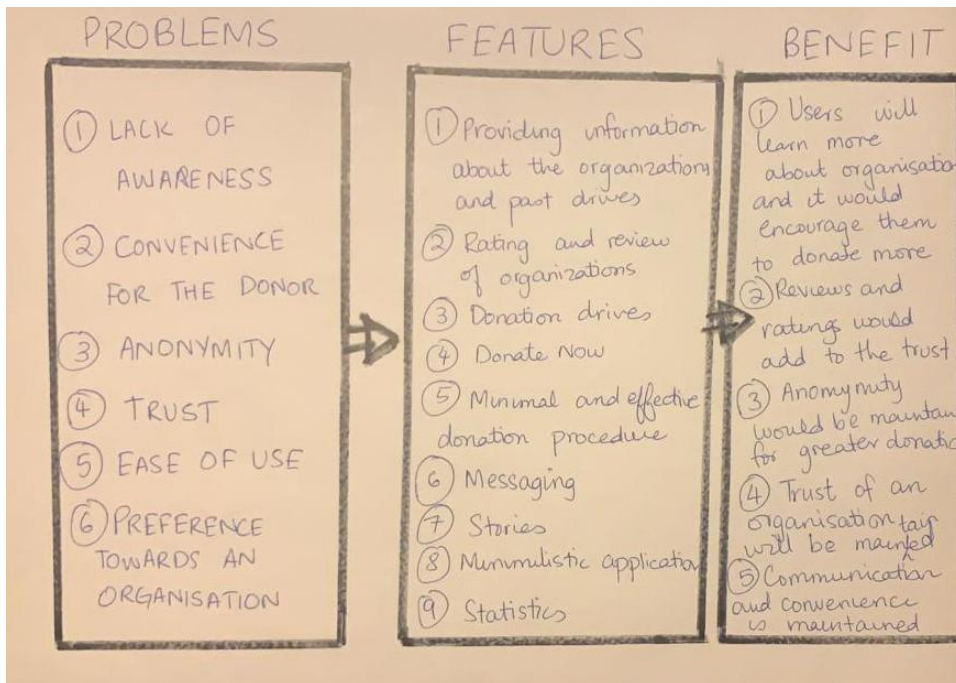
Ensuring accessibility for everyone

According to a study conducted, 4.5% of the global population experience color-blindness. Therefore, to keep those users into consideration that would not be able to view the green and red colors in the success and error messages of the application. As red and green colors are the most affected by color-vision deficiency, it would be better to ensure the error messages are written clearly so it does not frustrate the users. According to the W3C’s guidelines, the colors should not be used as the only visual means of conveying information. Therefore, throughout our design we have kept the check mark and the cross signs to indicate if the field has been filled correctly.

Workflow

The flowchart below helps to illustrate the mental model of our application. The features highlighted above have been incorporated in the flowchart and build a flow of how our application would be structured. All the features are displayed in a systematic way ensuring a harmonious user experience.





6. Sketches – 2%

The sketches of the design have been implemented and added in the folder

7. Scenarios – 10%

Scenario 1

Sasha goes up to her mom and asks her to buy her some more clothes. Her mom declines, saying that she already has plenty of clothes and she must think about donating some of them. Sasha agrees, seeing that she has plenty of clothes that she either doesn't use or has outgrown. She just never bothered to approach the relevant parties because of the hassle involved. All of a sudden, Sasha remembers that her friend told her about a clothing donation app that aims to reduce the effort required on the part of the donor so she decides to try it out. She opens up the app and selects the option to donate. She then enters the relevant details, chooses the type and amount to donate. She then takes pictures of the clothes she wants to donate, specifies the type in a dropdown box, mentions the quality of the clothes and picks the organizations she wants to donate to. She opts to have the clothes picked from her house. After all this, her work is done and doesn't need to worry anymore.

Scenario 2

A guy is sitting on a train with his friend casually going through his Facebook newsfeed. All of a sudden, a post about our app catches his eye. Intrigued by it, he decides to go to their Facebook page to see what it is. He

notices that it is a clothes donation app. Upon further scrolling, he decides to check the reviews so that he can gauge their reliability. Upon seeing favorable reviews from many different people, he decides to download it. His friend who also has the app advises the same and describes the extent to which it has made the donation process easier for her. Upon reaching home, he downloads the app and creates an account. He goes on to browse our app's homepage. Wanting to know more about the work that most of the organizations are doing, he clicks on one of the donations drives and is redirected to that page. He can read up on the organizations work, their process, their goals as well. He can also see a progress bar indicating the amount of clothes donated and the time remaining for the drive to end. By reading up on this, he gets a better idea of the communities the organizations are connected to and the dire need for necessities that said communities face. He is driven by emotion and feels the urge to help out; he gathers unwanted clothes from his closet and begins the process of donating. He selects the option to donate, fills the necessary details and donates to the organization he read up on. He will now consider making it a habit as he is more aware of the plight of the underprivileged, and he proceeds to spread the word about Kapra Eid starting with his sister.

Scenario 3

A donor used our mobile application to set up a pick-up appointment for 4pm. However, it's 4:30pm and the rider from the organization hasn't arrived yet. Joe is anxious that they may not even arrive at his house so complains to his friend about the organization. His friend tells him about the message feature in our app in that he can contact our driver at his convenience. So, Joe opens the mobile application and navigates to the messaging feature. He messages the organization page inquiring about the rider and the organization responds within 5 minutes. The organization lets them know that there is a delay due to rain and the rider would require another 30 minutes to get to their place.

Scenario 4

A user of the mobile application representing an organization is notified that they have new, unread active requests from donors. He navigates from the homepage to the requests and see that some donor had offered to donate a set number of clothes to them of a specific type. He accepts the donation and checks the pickup details (address as well as time) and sends their rider accordingly. The driver arrives 5 minutes prior to the given time, collects the clothes from the donor and delivers them to the organization.

8. Storyboards – 5%

The storyboards for each of the scenarios have been implemented and added in the folder

9. Low-fi prototyping (Process) – 20%

Designing the prototype

The purpose of Low-fi prototyping is to visualize the conceptual design model and test the functionality of the screens. After discussing the final design, we started building up on our prototype on Balsamiq on an android phone of the dimensions 356x700. The goal of our application is to ensure that the user finds the whole process

of donation to be convenient, they are aware of the organizations that carry out the process and there is an efficient communication and trust between the two parties. We have used techniques from both horizontal and vertical prototyping: The horizontal prototype gives a broad view of the system whereas the vertical prototypes give a few details about the application process. For example, in the donation process the flow of the screens were extremely important to highlight the functionality of the application and therefore, the processes involved on those steps were shown. However, we have not tested each and every detail involved at this level of prototyping. This is because irrelevant information such as terms and conditions, functionality of search bar and a few others were not important at this stage of the design.

Donors low-fi prototype

We understood that as this was a new application and the user might not know about the whole process of donation so in order to facilitate the user, we designed a brief tutorial about the about the purpose of the application and the process of donation. This process was showed before the registration process. It was ensured that all the welcome screens had a login and sign-up button so if the user wants to get started immediately, then they can do so.

The Sign Up and Sign In screens were designed in a way that the user can conveniently swipe between the two screens. We ensured that the sign-up screen contained fields that were relevant to our application so prevent the frustration of the user. Once the user has signed-up they get a feedback to check their email for an activation link. They are also shown the button that navigates them directly to the login screen. In case they have forgotten their password, they can tap on the hyperlink which will redirect them to a screen that asks for their email and informs them to check their email.

After logging in, the user is directed to the home screen. They are displayed the core features on the homes screen. We tried to keep the interface minimal and only the essential features were included. Stories by the organization were at the top on the screen and the user could view the donation drives being conducted by all the organization along with the list of organizations. We chose to have the current donation in a horizontal carousel so that there is not much vertical scrolling done by the user. We have included the list of organization vertically with a search bar so that they user does have to go through every single organization card to find his preferred organization.

Furthermore, the organization's profile was displayed to the user with a short description, a logo and a tap bar displaying 'about', 'posts' and 'reviews'. The user can easily swipe between the screens and look at the provided information. The persistent large raised button is present on the organization page so the user can easily move to the donation process any time they want.

We tried to keep a feedback system for the user at every step so that they are aware of the stages left in the donation. The user is also shown a tick after every successful donation they offer. The bottom menu bar is also highlighted so the user knows the current menu they are on.

Organization low-fi prototype

We did not include a signup screen for the organization as we did not want to give the functionality of any organization registered on this platform. The organizations that want to register can contact us and we would provide them with the credentials. The home screen was of organization's side was very similar to the donor with an addition of the camera icon at the top. The organizations can easily swipe right to post a story without navigating further into the application. The stories the organizations have posted would be displayed to them on the home screen where they could quickly view or delete a specific story. They can also view their own donation drives on the home screen in a horizontal carousel. They have been provided button where they can either delete their previous drives or add a new drive. These drives have precedence to the 'My Posts' so we included them above the organizations post. The organizations can also post a new post directly from their home screen by pressing an icon. This was done to ensure a low learning curve is present for the organizations representatives and they can easily focus on their actual task on collecting and distributing the clothes.

10. Results of paper prototype testing – 15%

As aforementioned in the document, each side (organization and donor) of the mobile application is divided into four main section. The users were made to explore each section and navigate to various subsections to perform the more important tasks of the application. During the process, their behavior as well as their feedback allowed us to look at the application with a more practical lens; a host of minute details with margin for improvement came into light and will factor collectively into the decisions we make during development of our project. It is important to note that users do not always directly critique the prototype or provide suggestions explicitly for the application as it is inconvenient and seen as potentially discouraging to the developers of the application. Hence, to best enhance our learning from the paper prototyping activity, we had to delve deeper into their behavior. When the users went through the different features of our application, they reacted in different ways to each of them. Oftentimes they seemed sure about what a certain button led to while sometimes they did not and found out only once they clicked it. For some very important tasks, they did not find clear direction about the sequence of steps to observe and had to look for their way around.

Organizations

In consistence with our final design, the users were shown the home screen upon logging in as an organization representative where they worked their way around the different portions of the screen and tried each of them out individually.

- The users were notably assisted by the heading provided for each portion; User 1 was the most vocal while testing the application and said the heading out loud before they went to explore them and although the posts and donation drive cards were very similar, they had no ambiguity in what stood for what.
- The icons used did their job in most parts as the users were able to tell very efficiently where to edit the posts or delete them. In fact, the inclusion of the edit icon next to the posts or drive details prompted our user to try the edit feature for all cards, which would not have been the case had the icon not been there. However, the camera icon did not make its function clear.

While the intended purpose was for the organization to upload stories (similar to Instagram and snapchat), User 1 jokingly commented that they would use it to take an ugly selfie after stating “the camera icon looks interesting”. User 2 also only said they opened the camera to take the picture and then closed it, showing no understanding of what the picture was for. This is clear indication that there is unclarity about its purpose.

- Our users seemed to particularly appreciate the pop-ups for feedback. User 1 mentioned the pop-up every time it came up to confirm the action that they performed; they said “congratulations, the post I was deleting has been deleted” when it verified that the post no longer existed and seemed fascinated with the immediate feedback. User 2, at the end of their walkthrough of the application, mentioned that their favorite part of the mobile application was the constant feedback provided throughout. Hence, we will take this not just as validation but also as a reminder of how much of a difference feedback makes and will take a closer look if we can include more of it at any point in the mobile app.
- In the donation drive section, we have included a representation in the form of a graph as well as a half-filled bar to display the urgency of need for donation, which could act as a motivating factor for the user. However, our User 2 took a significantly long pause after opening this screen before they made any comment, which could mean that the bar or the graph is not as easy to interpret for the user and does not accurately display the situation. This is something we plan to study in more detail.

Through the navigation bar the users could move between the four broad sections. Next to the home screen is the notifications section where the user is informed of important updates with regards to the procedure of donation and the response from people.

- In the list of notifications, some of the notifications had the option to “view more”; more precisely it was the notification where a user had requested to have clothes picked up from the organization. Since for most of their walkthrough of our application, the users seemed to have a fair bit of clarity about where a certain action led, it was easy to note when this clarity was absent. User 1 took a pause and had to select the option to know what it did (led to a screen where you could accept the offer). Perhaps, saying “respond to request” would better suffice to explain the functionality. User 2 also clicked on “view more” in the hope to find out what it led to. This observation, although minute, is important because this is the absolute first step on part of the organization in getting in touch with the donor, which is the most fundamental role of our mobile application.
- It is also important to note that while looking through the features of the application, the request from the donors is about the sixth screen that the user visited and they did so without prior knowledge of the sequence of step. Perhaps a disclaimer on the home screen that said “check notifications to connect with donors” would make the procedure more efficient.

Following the order from left to right, the next screens visited by the users from the navigation bar were that of the messages.

- The messages screen was about the seventh screen visited by the user even though there were messages in the inbox. The user may well have missed the messages if they didn't wait long enough to go through every single feature of the application

Our messages screens follow a very conventional and simplistic design and were not a major part in our prototype testing as inevitably, no user faced any trouble in navigating through it. One important observation, however, during switching through the navigation bar was that when the user was done with the screens and wanted to move right to the profile screens, I took a little delay in placing back the navigation bar, and the user wasn't able to shift in the absence of the navigation bar. While this is not a worry as the navigation bar is there at all times, it is oftentimes more convenient for the user to swipe right or left to switch between the screens, and this delay reinforced the need for this feature when we develop the mobile application. Finally, the users shifted to the profile screens. Like the messages screen, the profile screen is standard, and the users did not face any obstacle in navigating through it. User 1 tried every single feature in the profile screens, including the change password feature, and User 2 tried just the about us screen, which was the most important bit in the profile.

Donors

We asked the users to perform a couple of key tasks that our application supports just to gauge how convenient the processes are and if our design is creating any sort of hindrance in the process. As for organizations, the first page upon logging in is the homepage. The homepage contained a section for stories view. Then, there were blocks of active donations and below that, there were list of organizations.

- User 3 felt that the excerpt of information about active donations or organizations displayed on the information was adding to the text intensity of the homepage and not really imparting key information to the user at a glance. They suggested that instead of a paragraph, there could be bullet points of city of office location and rating of the organization and for active donations, we could display its length of time of activity and location. If a user finds it interesting or relevant to them and they wish to inquire more, then they will press for more info and they should be provided the details over there.
- Users could immediately identify that the round shaped icons denoted stories posted. Though, being alien to the features of application, they may not be sure who were they posted by. After clicking on the icon, users can view the story. They can either click on the organization's name to view their profile or close it with the arrow given on the top to return to the homepage. We noticed that users took a pause before they could find out how to close the story. This was probably because different social media applications that support the feature of stories have slightly different way of closing the stories than what we implemented. We had a down arrow at the top of the screen in the center. As compared to the usual swipe down feature. Therefore, users had to eyeball the screen to find if there was any other arrow before they could safely click the down arrow. User 4 was kind of skeptical about the purpose of stories in this

application because he was not sure if he would be using this application as frequently as daily to view the stories daily.

- Users surfed through organization posts and even like some posts. In the third section of organizational information, users read the reviews other users have made about the organization. This would give the user an insight of the kind of experience they can expect in their dealing with that particular organization. The users could conveniently browse through the organization's information. However, user 4 wanted to contact the organization but could not find the relevant option there. Users can chat with any organization in the messages screen but that option was not available while user was surfing through organization profile.

We had used the white spaces diligently, which made it easier for the user to decipher between different sections of a screen. All the sections were outlined and were evenly spaced with each other. Though, most of the newsfeed and information screens were displaying more information and in general it was observed that users could more conveniently choose an option in performing a task. This is because each step of the screen contained a limited number of fields that were to be filled. Hence, generally, users took less time on screens of steps than what was elapsed in newsfeed screens etc. Once done, with the homepage, the users navigated to the pages of organizations.

- A major issue that users faced was that the two major tasks that the users had to perform were not present on the navigation bar not on the home screen. The two tasks were of making a donation post and posting a review. It was found that these two options were not accessible directly. Users felt that it assumes that donor would only donate when they like an organization's profile. If the user opens an application to donate, they would have to either choose an active donation or an organization's profile to access the donate Now button.
- While choosing clothing details in the donation process, User 3 felt that the picture should be optional because sometimes the clothes are not readily available to you when you are making the post. They suggested that we can ask the user to specify the size and type of the clothes they are donating.
- The pickup details section required the user to add the time and day when they want the organization to pick their belongings. User 4 was a bit unsure about the time they should choose that suits the organization's logistical requirements as well. They suggested that instead of asking the user to choose the time, we could give the time slot during which their vehicle is going to serve the user's vicinity.

Conclusion

The results of our prototype testing are beyond satisfying in the sense that we can now view the mobile application in better light and from a new user's point of view. We have presented a run-through above of the users' experience during the prototype testing for both the organization representatives and the donors and have made notes to scrutinize the features that caused even the

slightest trouble and assess what can be done about them. Now we have specifically listed down the obstacles and possible remedies that we plan to consider during the development of the application

- Camera icon on home screen (organization): Since both users from the organization end were unable to have any idea that the camera icon was to upload a story, we can conclude that we need to add further explanation that will go with the icon to convey its purpose. For this, we will be adding in small font, a message below the icon, which says upload story. In addition, we observed that for adding new posts and donation drives, there was a separate section under a heading. We can do the same for stories, which would leave no margin for ambiguity.
- Graph + urgency bar for donation drive (organization): Since, User 2 took a significant pause but did not comment on it is, it is possible that the representation could have confused them. We will consider replacing the graph with a clock that is ticking next to information about the number of hours left if that better conveys the urgency and is a more fitting representation.
- Respond to donation request (organization): Given that this is the more fundamental feature of our mobile app, the sequence of steps to be followed needs to be clearer. We will consider adding a message on the home screen which prompts users to swipe left to view donation requests. We will replace “view more” with “respond to request” and will consider ordering and displaying requests for donation above less important notifications like likes on the post.
- Messages: Although this was already in our plan, the time it took for a user to reach their messages reiterates that we need to implement push notifications and add some sort of indicator next to our message's icon in case of new messages, especially given that our mobile app needs to guarantee quick response from either side.
- Swipe between screens: The users manually clicked on the relevant screen on the navigation bar. We will make sure to add the feature for them to be able to swipe right and left to switch more conveniently between screens.
- Feedback: Given the appreciation this received, we will go through our entire mobile application and see if there is further room for immediate feedback to be given to users so that our users are satisfied.
- Major Tasks (Donor): Donors found it difficult to locate the buttons to perform primary tasks of donate now and post a review. Therefore, we will ponder upon adding them in home screen or navigation bar.
- Organization details (Donor): Users felt that the organization's contact information should be present in organization profile. So, if the user wants to drop a message or directly call the organization, they should be able to do that so we plan to include that in our final version.
- Stories close button (Donor): Since, the users found it difficult to locate the button to close stories, we plan to use the traditional way of closing stories i.e swipe down.

11. First draft of the final (hi-fidelity) Interface – 10%

Following the testing of the paper prototype, we figured a few problems that the users were facing in the low-fi prototype. These errors have been rectified in the hi-fi interface and we have made a few screens to show the look and feel of the design. The screens that we have made are the ones that are essential to the functions of our application and is consistent with the simplicity, white spaces, contrast, balance, alignment and consistency.

Simplicity

Our design explores simple messages with icons and a short description so the user can identify them easily. The navigation bar points to the home screen, notifications, messages and profile for the user. So, they can conveniently select them. The icons have a minimalistic learning curve because they are icons used in everyday application and the user knows about them. Cluttering on the screens are prevented by spacing the icons and ensuring that the user knows which reference refers to a particular icon.

Contrast

We used a linear gradient of two shades of blue with hexadecimal values of 61D2CB and 2DB0DA. The background of the screens is predominantly white whereas, the contrast is created by using blue buttons. There are also a few colors used in validation and errors which are kept to be green and white correspondingly. This is because the user knows what each of the colors indicate and can identify their errors corresponding to the fields. We chose these colors because these two shades of blue present a good transition and the lighter colors ensure that there is less visual overload on our end users. Since we want the user to feel calm and relaxed throughout the design, we have chosen these colors. The click-able buttons are made apparent by using a darker shade of blue and making them stand out from the inactive buttons. The tiles demonstrated for the donation drives on the homepage, are highlighted through the drop shadow to ensure they stand out and give a materialized appearance.

White spacing

We used white spacing to highlight and group different elements on the screen without using lines. This is done to ensure that the user is not confused about the design at any point and there is a sufficient transition in the screens. It is ensured that there is not too much spacing to prevent the screens from looking empty and dominating the screens.

Balance

To reduce the anxiety and stress on the user, we ensured that our screens followed a symmetric layout to keep the screens implicitly balanced and aesthetically pleasing. The vertical and horizontal scrolls on the screen ensure that there is a variety of gestures that the user can perform and there is a balance between them.

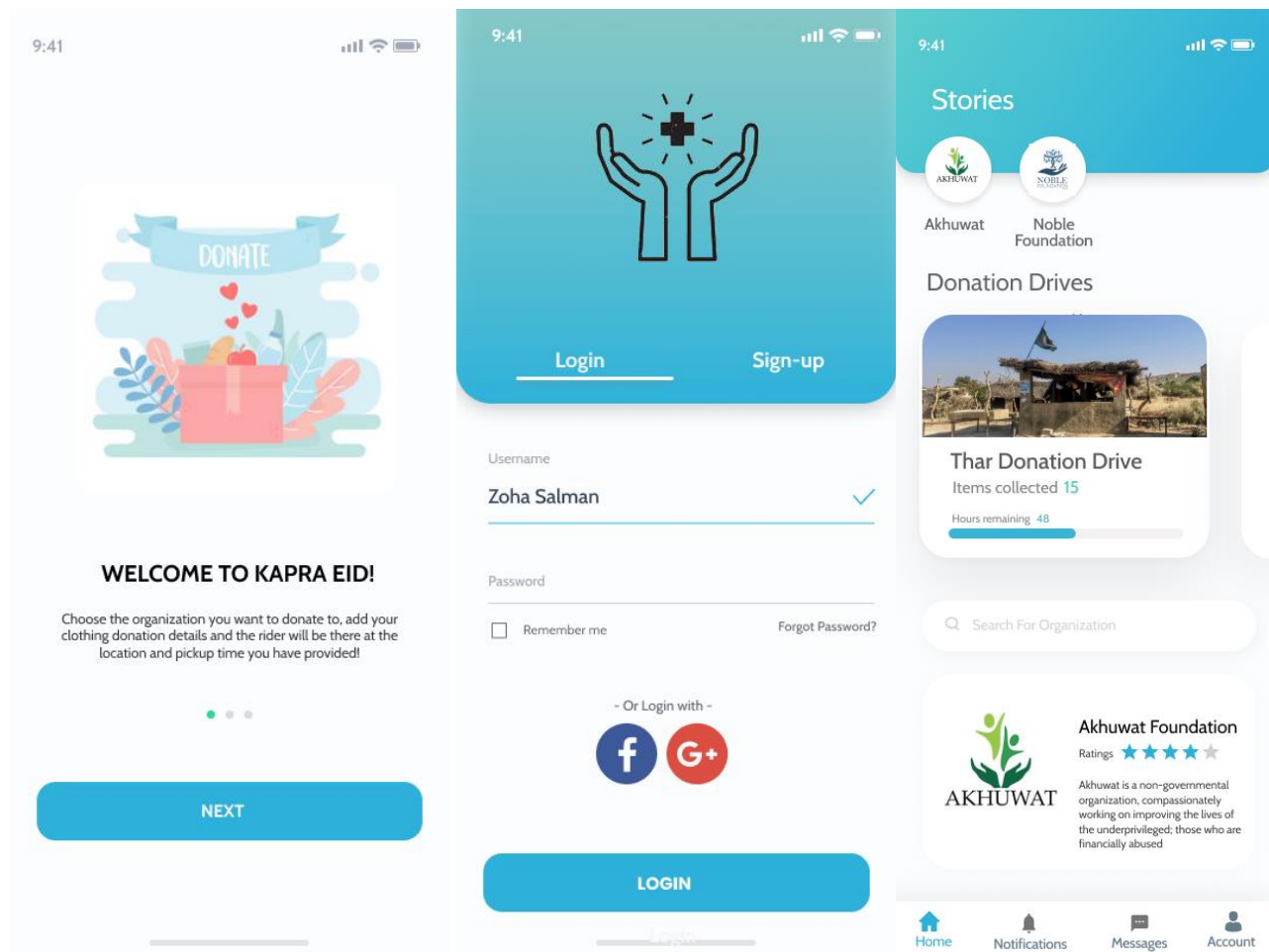
Alignment and Consistency

The screens and buttons are aligned in a way that they are justified for the buttons and the labels are centered on them. The screens are kept consistent throughout, ensuring that the user has a comfortable experience. The iPhone taskbar and layout are followed throughout the design.

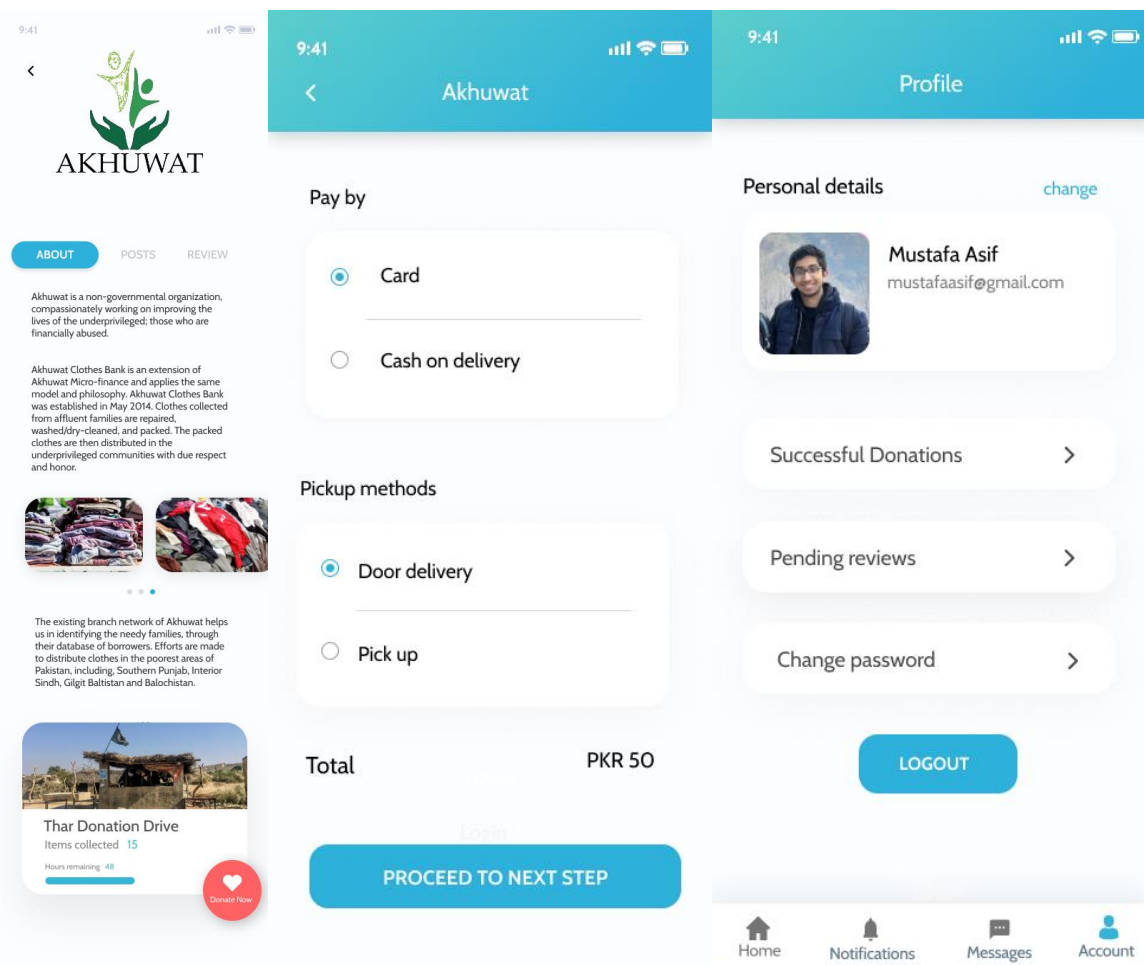
Final Design

The hi-fi designs are shown below:

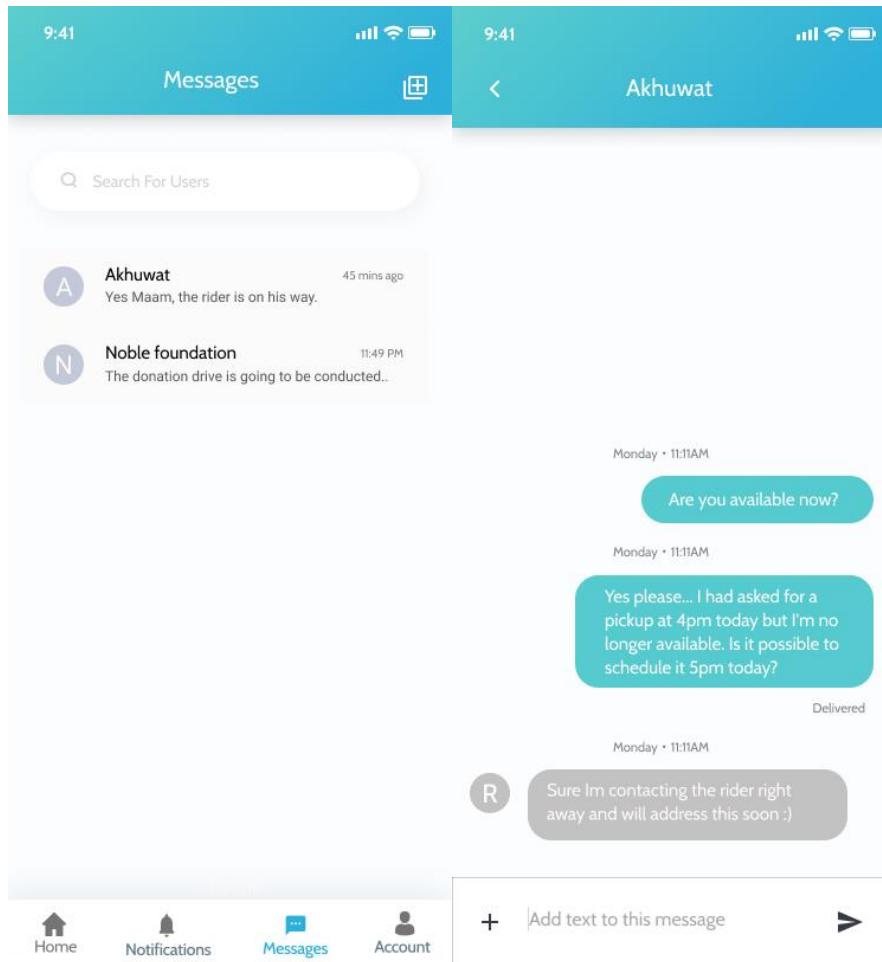
Firstly, the welcome screen explains what the application is about, the next button is the only button kept on the screen so that there is not much cluttering for the user. The progress bar on the screen follows the designing conventions of an application. The user can then sign up or login to the application and the remember me feature is added after the low-fi for the convenience of the user. The validation option and colors of the field ensure that the user knows if the field has been filled out correctly. The homepage screen next, shows the stories of the application and the donation drives include more pictures as compared to the text, after the testing of the application. The screen also contains less information overall and the colors of the progress bar and items collected ensure that there is less eye strain on the user. The navigation bar highlights the screen that the user is on and the color is consistent with the theme of the application.



Furthermore, the organizational information can be viewed after the user clicks on the button, and options for exploring the organization, viewing the posts and reviews are displayed. The progress bar for the clothes is shown below the pictures and the donate button is kept to be pink so the donate now button is evident on the screens. The donation process includes payment and the next screen demonstrates how the payment can be efficiently shown and the payment amount is added after the users had asked for it in the testing. The profile of the user also contains efficient details about the user like the successful donations, pending donations and change password and they are highlighted by the drop shadow to ensure the user is aware of where they can click.



For efficient communication between the donor and the organization, the user can message them and the time for each of the messages is shown. The user can click on the icon to message other users and they can also view their messages and the time associated with them. The delivery of the messages is also shown and it is kept consistent to the IO guidelines to ensure an efficient communication mechanism with little difficulties.



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