



Sri Lanka Institute of Information Technology

SE3050 – User Experience Engineering

Milestone 06

Project ID: uee_fp_sej004

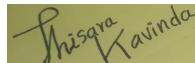
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User Experience Engineering SE3050

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Declaration

We declare that this is our own work, and this report does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any other university or institute of higher learning, and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgment is made in the text. Also, we hereby grant to Sri Lanka Institute of Information Technology the non-exclusive right to reproduce and distribute our report in whole or part in print, electronic, or another medium. We retain the right to use this content in whole or part in future works (such as articles or books).

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Abstract

This application is implemented with the intention of having a sustainable cities and community. In the modern world, with the fast-growing technological background, people are less careful on the environment. Specially with the increasing population which goes hand in hand with the reduction of lands have made people in to a trouble with a cleaning environment. In order to solve this, the businessmen have taken the power into their hands by instantiating cleaning companies which recruits cleaning staffs for others. And also, the volunteering organizations such as Rotaract, Leo, AISEC, IEEE and etc. organize the cleaning events and volunteers all around the world are engaging with them.

For the above scenarios, the main problem they are having is communication. Without having a proper communication method, all the stakeholders in this scenario face a lot of problems. So, as a solution for the above situation, a mobile application is developed which is called as "Clean Home". It enables all the stakeholders (Volunteers, Volunteer organizations, Cleaning companies, Recruiting companies) to login to the mobile application and proceed the functions.

This application is providing all the needed functions for the all four stakeholders. It would be great platform for everyone.

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List Of Abbreviations

DB – Database

UI – User Interface

1 Introduction

This application is intentionally implemented regarding keeping the clarity in the environment. This is designed as both a commercial application and a volunteer application. The main stakeholders mentioned in here are volunteers, volunteer organizations, cleaning companies and recruiting companies. Out of them volunteers, volunteer organizations belong to the volunteer category and cleaning companies and recruiting companies belong to the commercial category.

Volunteers are able to register to the system and login into the system using their credentials. They are able to select a category and find volunteer events for him. They are able to post on the events that they were engaged before. And also they can contact and get committed with the other volunteers as well.

Volunteer organizations are able to register to the system and login into the system using their credentials. They are able to select a category and post volunteer events that they are going to be held. They are able to post on the events that they had organized before. And also they can contact and get committed with the volunteers as well.

Cleaning companies are able to register to the system and login into the system using their credentials. They are able to select a category and add the available count of employees they are having. And also they can view the previously received requests as well. They are able to accept or decline the requests.

Recruiting companies are able to register to the system and login into the system using their credentials. They are able to select a category and request for cleaning staff they are in need of. And also they can view the previously sent requests as well. They are able to accept or decline the requests.

All these functions are included in the system and it helps all the stakeholders to make their work easy.

2 Background

2.1 SDG selection

Describe the solution you are designing to the selected SDG.

- Provide some context on the project domain e.g. explanation, problems, and needs.
- Explain why you chose this project.
- Who are the users, why is this solution important and helpful to them?
- Describe the purpose and the design issues you addressed when designing this.
- Screenshots can help to provide visual cues.

2.2 Design Purpose

Describe the goals you want to achieve from designing your GUI. Is it about user-friendliness? Usability? Efficiency? Attractiveness?

2.3 Team Members

1. E.T.N. Perera – Volunteer
2. G.L.S.E. Liyanage – Volunteer organizations
3. M.A.H.R. Nanayakkara – Cleaning companies
4. A.A.T. Kavinda – Recruiting companies

2.4 Contribution Table

Create a table that lists everyone's contribution on each section. Multiple group members can contribute to any single section.

3 Design Process

3.1 User Involvement

Users were involved through ms teams, zoom and phone calls. They contacted with saying and explaining what is the requirement they are having, what are the defects and what should be implemented more. They are contacting with us very often. It helps to grow more and produce a quality product.

4 Milestone 1: Identify user groups

4.1 Personas

4.1.1 Cleaning Volunteer looking for volunteer events

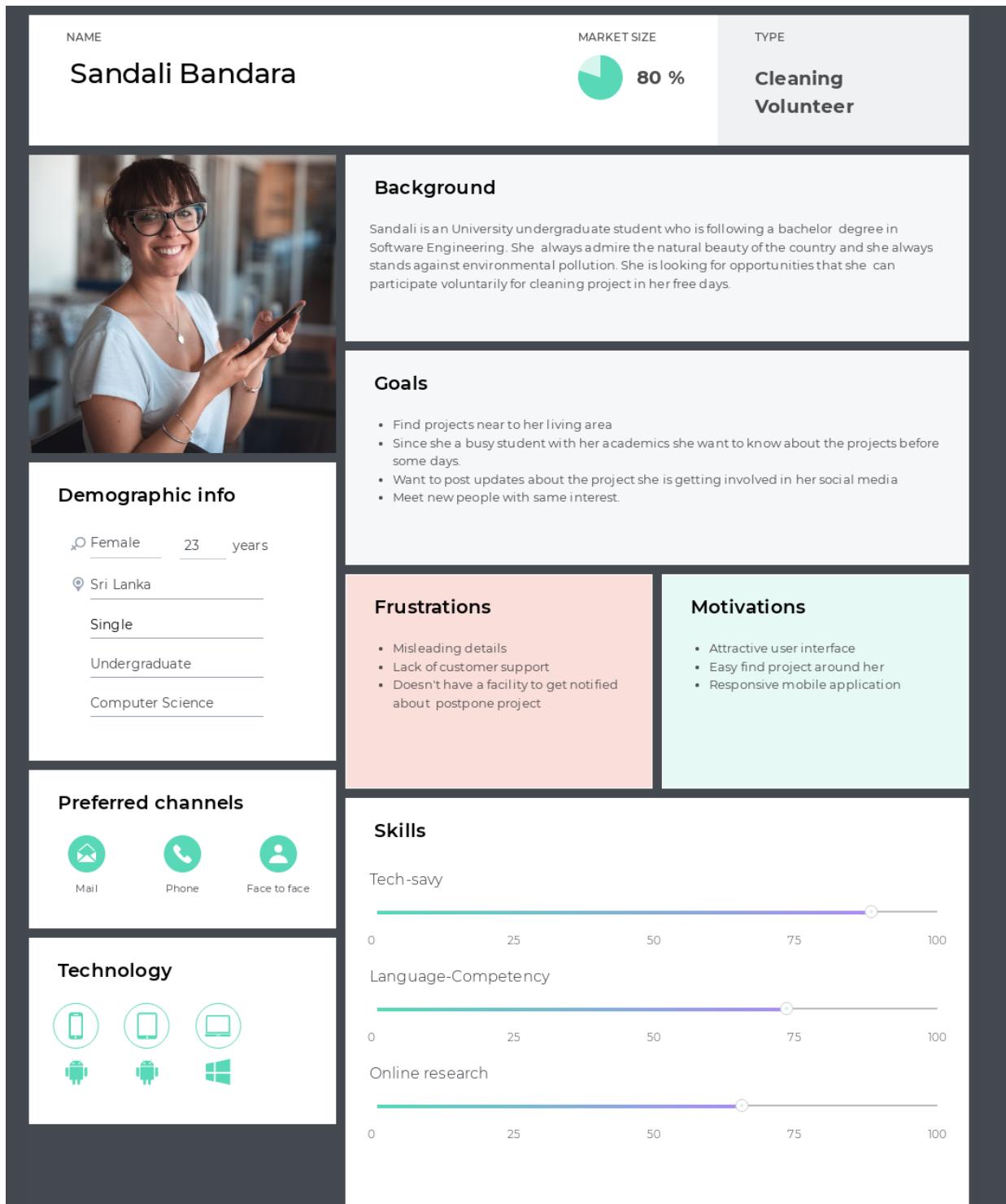


Figure 01 – Persona - Cleaning Volunteer looking for volunteer events

4.1.2 Member of a volunteer organization looking to organized volunteer events

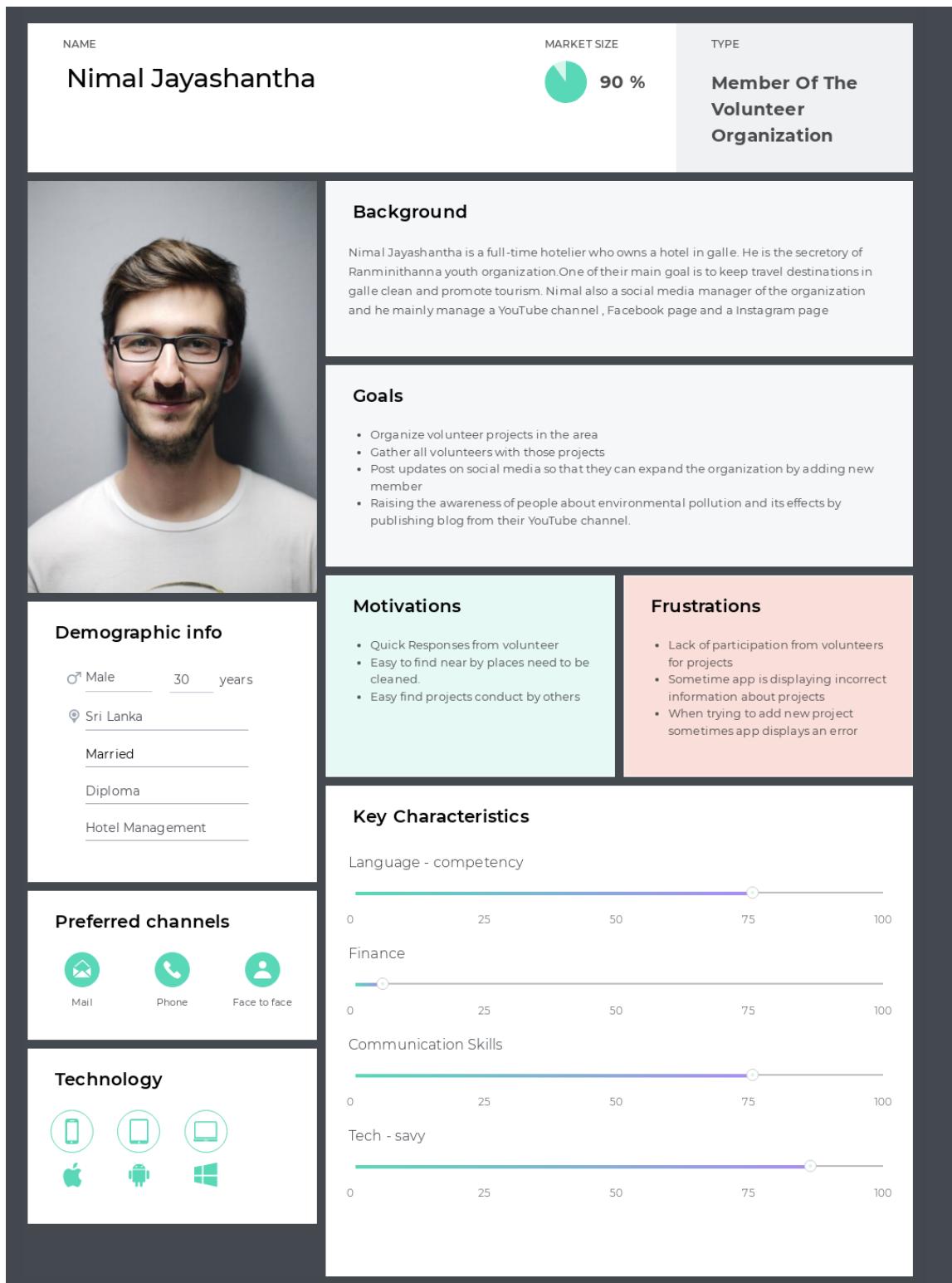


Figure 02 – Persona - Member of a volunteer organization looking to organized volunteer events

4.1.3 Manager of cleaning company looking for better opportunities for cleaning crews

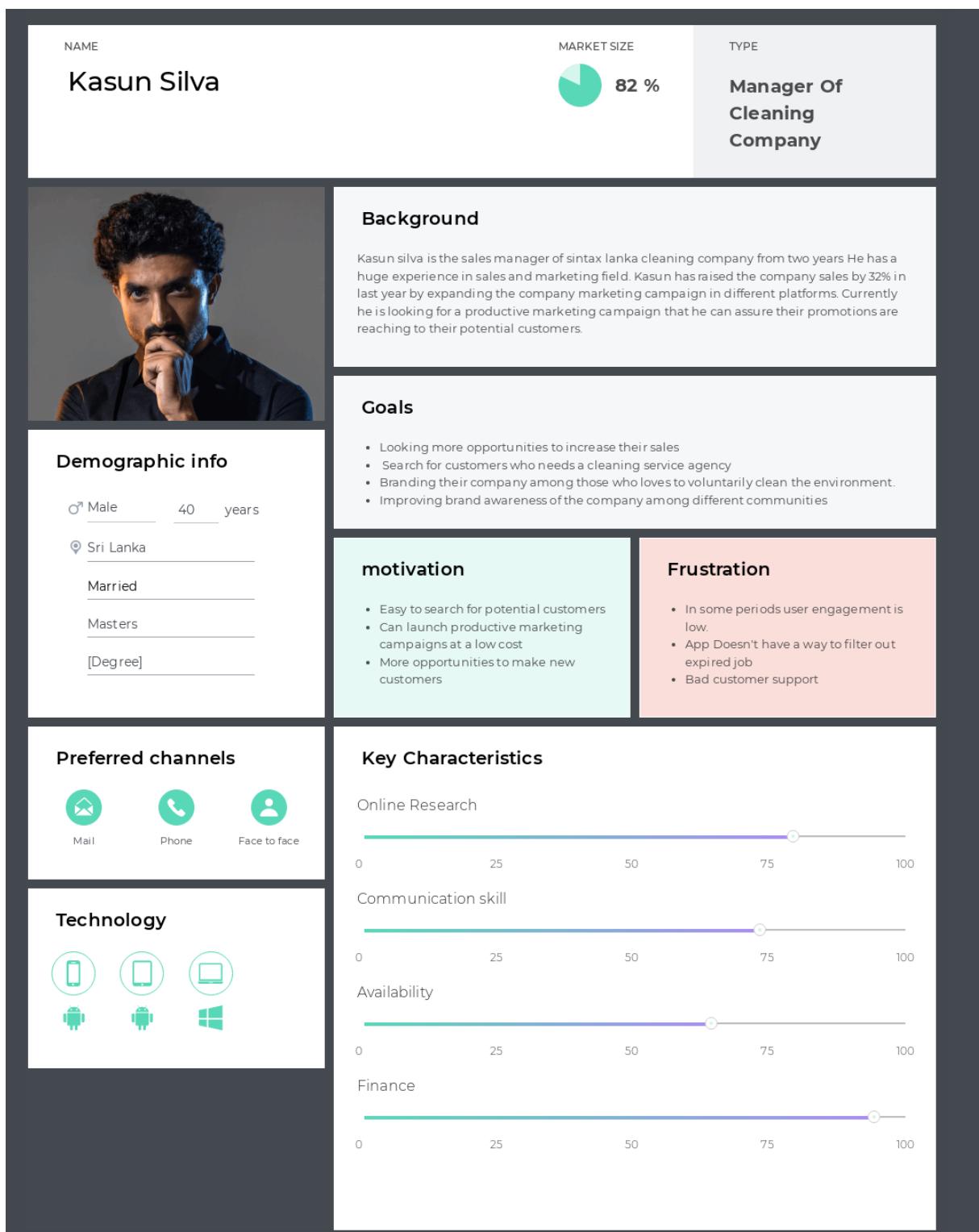


Figure 03 – Persona - Manager of cleaning company looking for better opportunities for cleaning crews

4.1.4 Manager of company who are looking for cleaning agencies

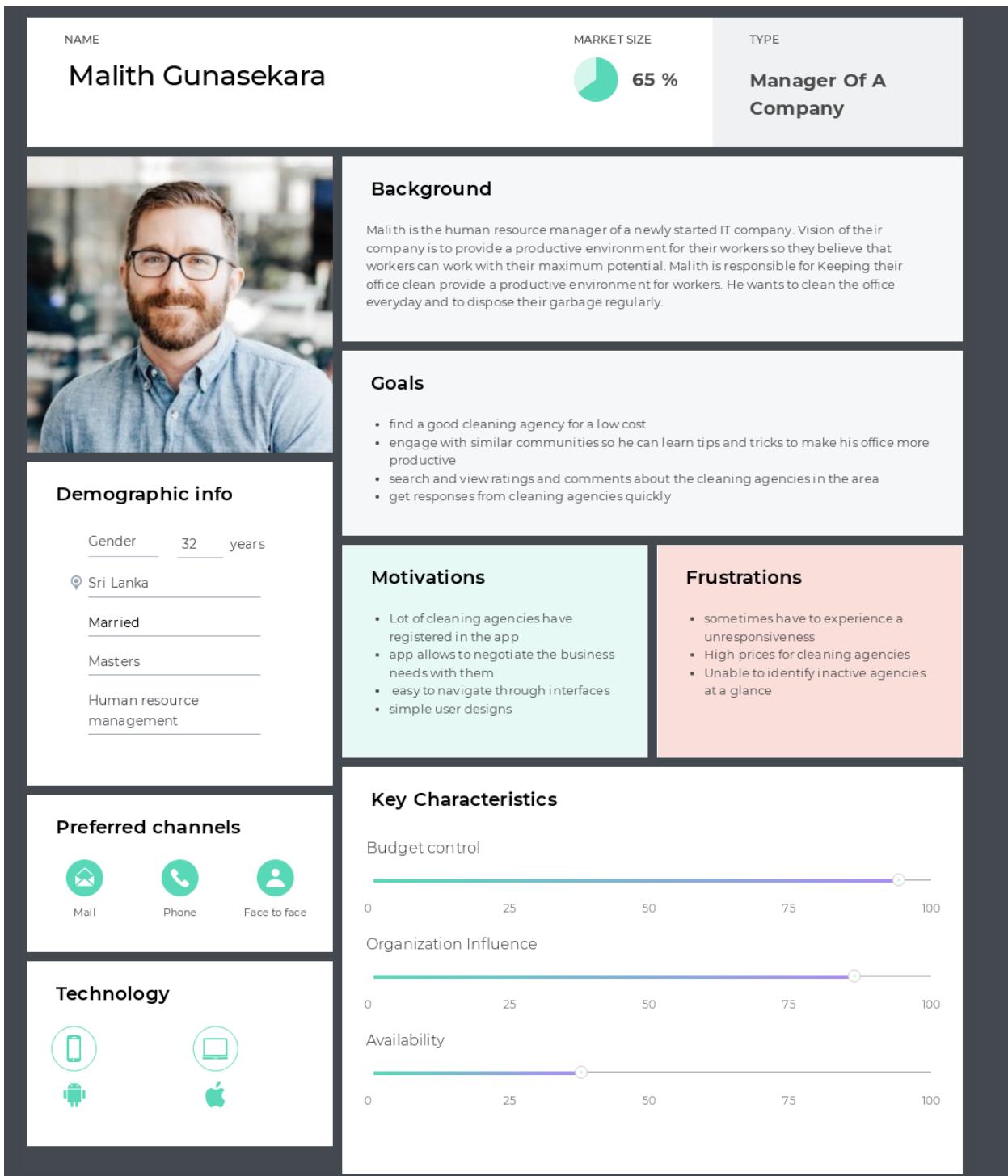


Figure 04 – Persona - Manager of company who are looking for cleaning agencies

4.2 Empathy maps

4.2.1 Cleaning Volunteer looking for volunteer events



Figure 05 – Empathy map - Cleaning Volunteer looking for volunteer events

4.2.2 Member of a volunteer organization looking to organized volunteer events



Figure 06 – Empathy map - Member of a volunteer organization looking to organized volunteer events

4.2.3 Manager of cleaning company looking for better opportunities for cleaning crews

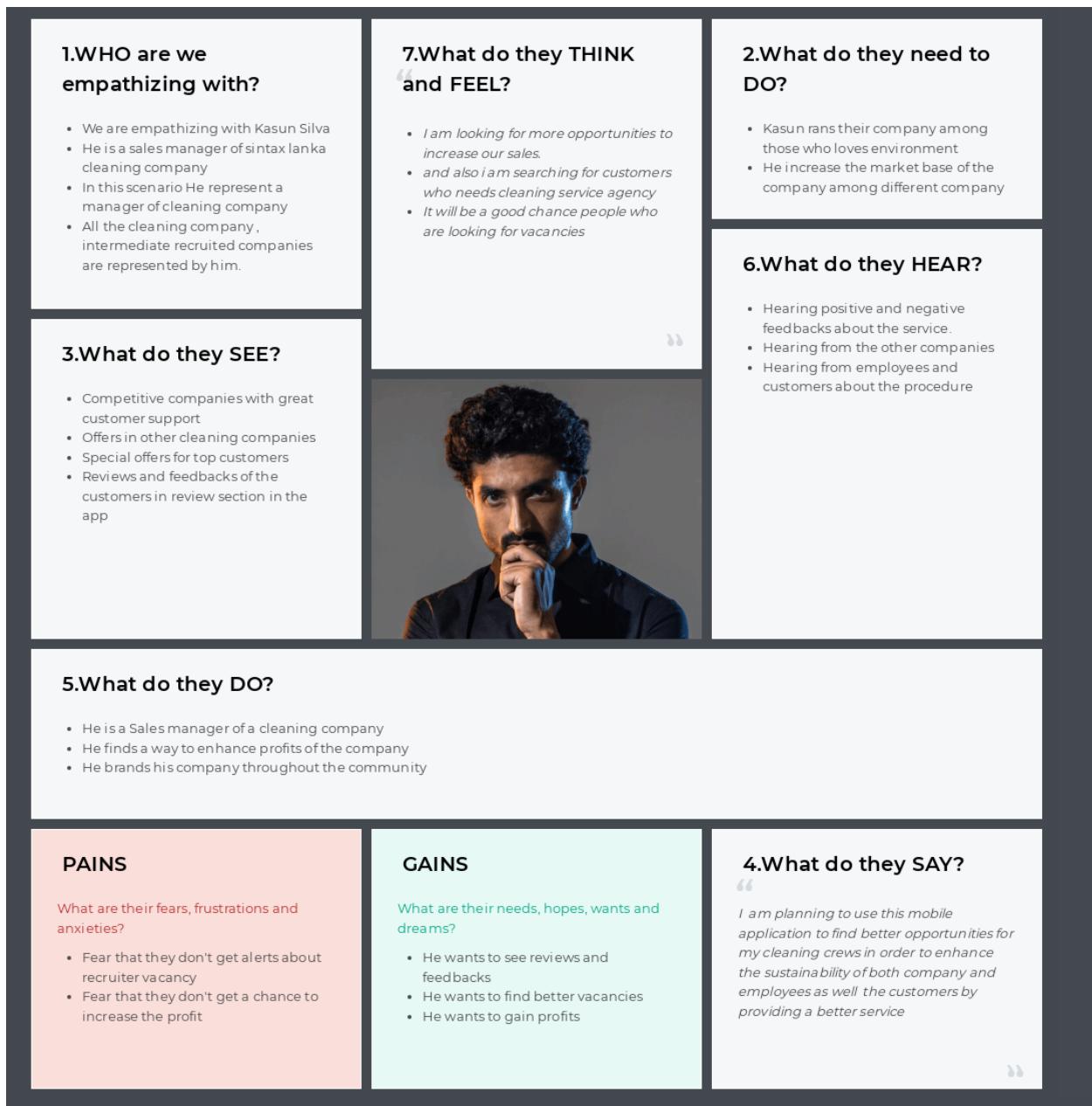


Figure 07 – Empathy map - Manager of cleaning company looking for better opportunities for cleaning crews

4.2.4 Manager of company who are looking for cleaning agencies

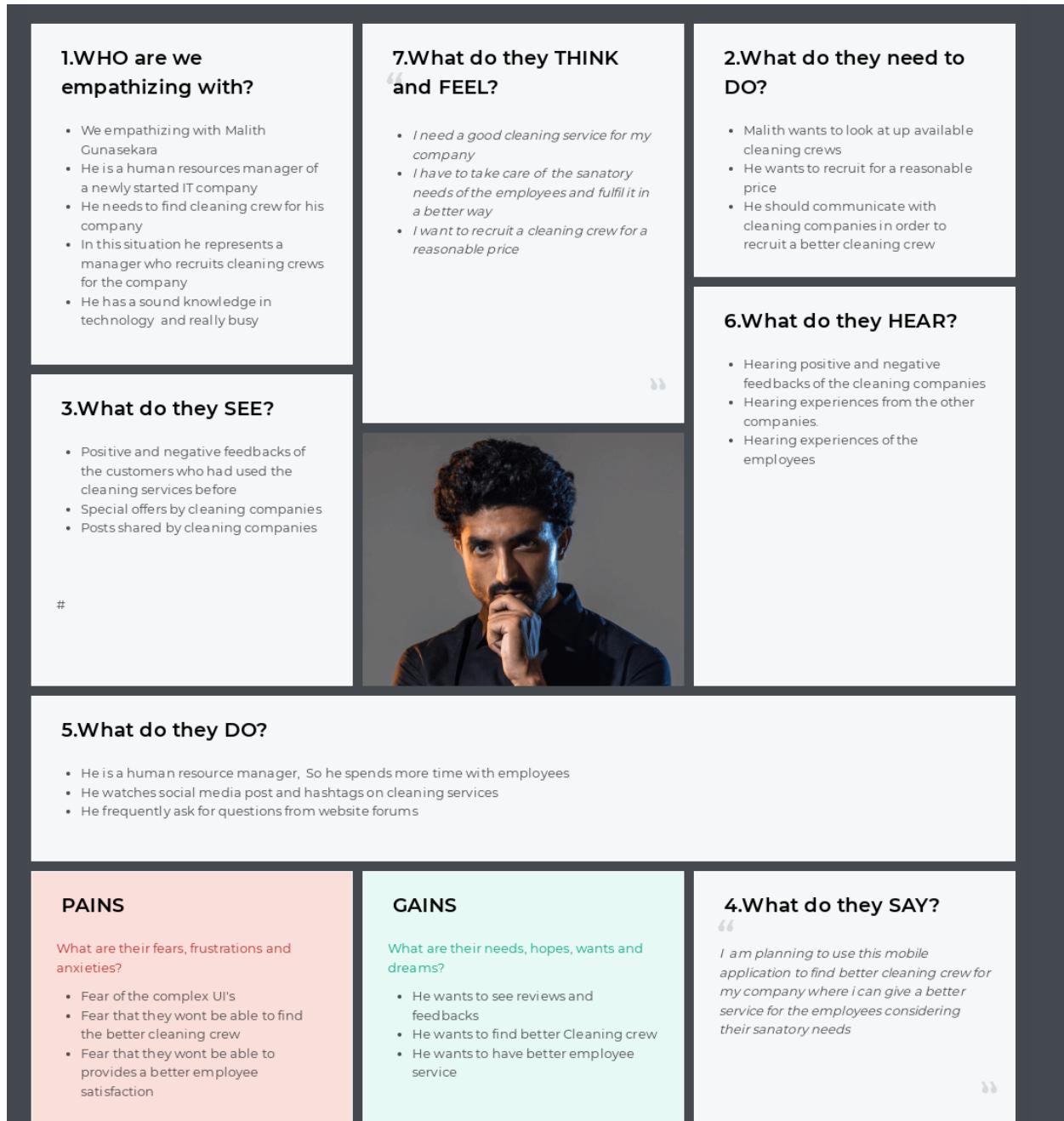


Figure 08 – Persona - Manager of company who are looking for cleaning agencies

4.3 User stories

4.3.1

As a cleaning volunteer, I would like to browse and engage with charity events published by volunteer organization so that I could enhance my self-satisfaction schema and help others and environment as much as I could do.

4.3.2

As a member of a volunteer organization, I can publish events that we are organizing all over the country for a large community, so that I will be able to connect with a large group of people who are willing to do charity works and grow up our organization.

4.3.3

As a manager of cleaning company, I would be able to browse and find out the opportunities to recruit my teams for particular companies, so that I will be able to find better opportunities for my teams and enhance both the company and employee growth.

4.3.4

As a manager of a recruiting company, I would be able to find cleaning staff for my company as per our requirement, so that I would be able to maintain the sanitary requirement of the company in the needed level and also give a chance to the cleaning crews.

4.4 User flows

4.4.1

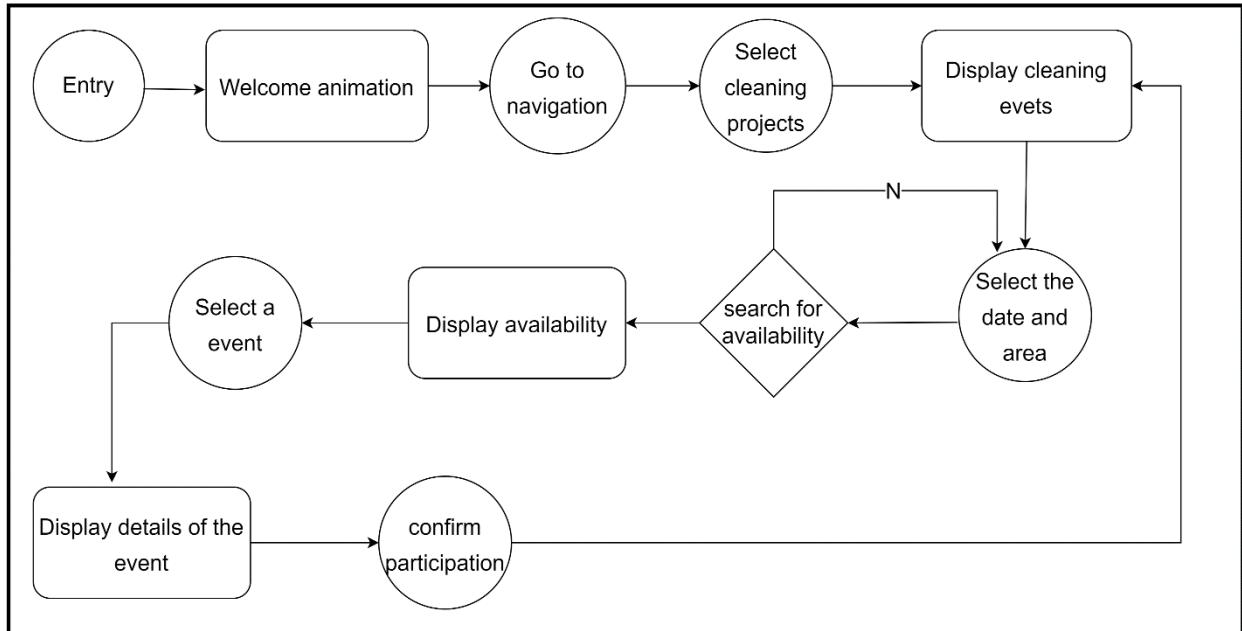


Figure 09 – User Flow - Cleaning Volunteer looking for volunteer events

4.4.2

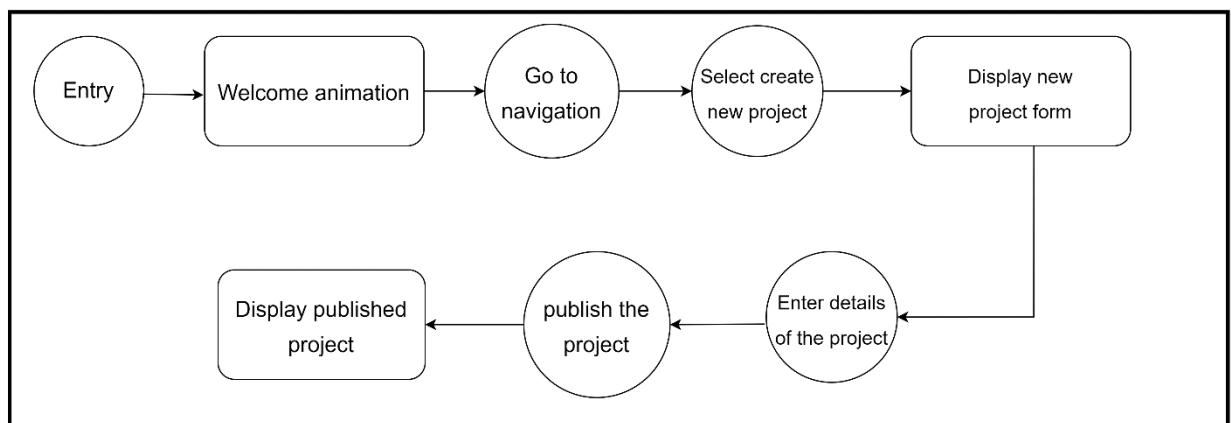


Figure 10 – User Flow - Member of a volunteer organization looking to organized volunteer events

4.4.3

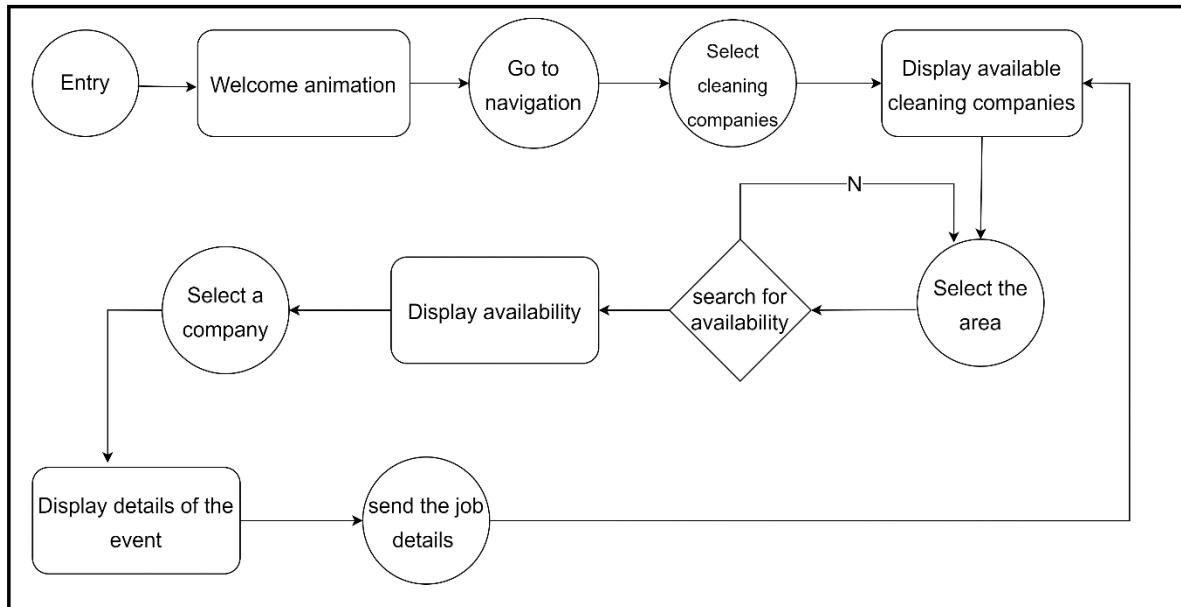


Figure 11 – User Flow - Manager of cleaning company looking for better opportunities for cleaning crews

4.4.4

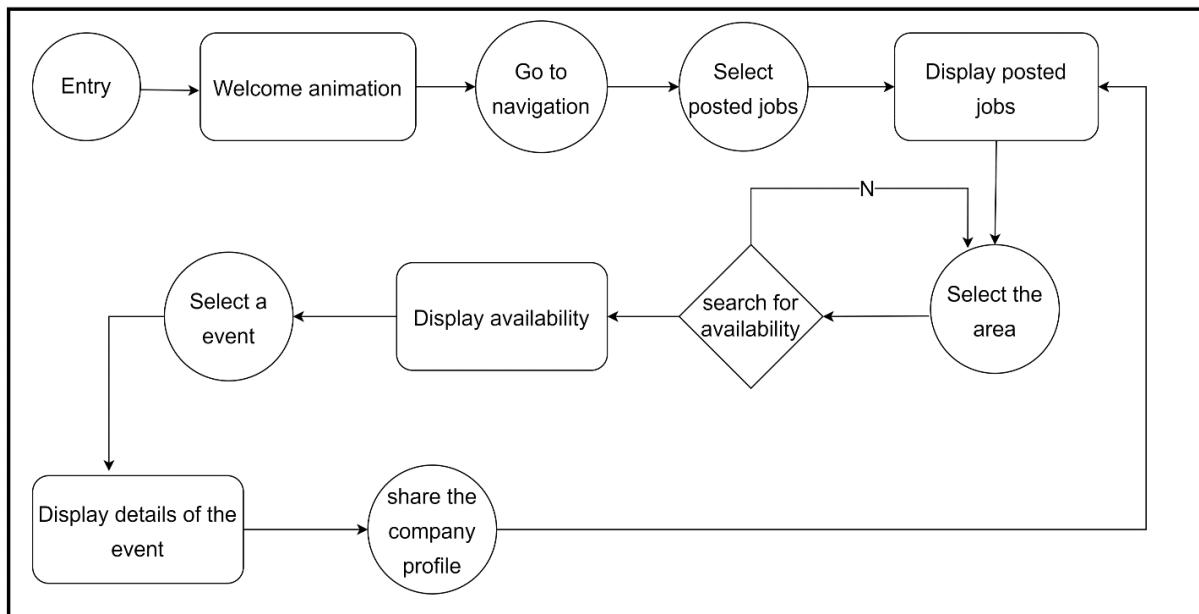


Figure 12 – User Flow - Manager of company who are looking for cleaning agencies

4.5 Service blueprint

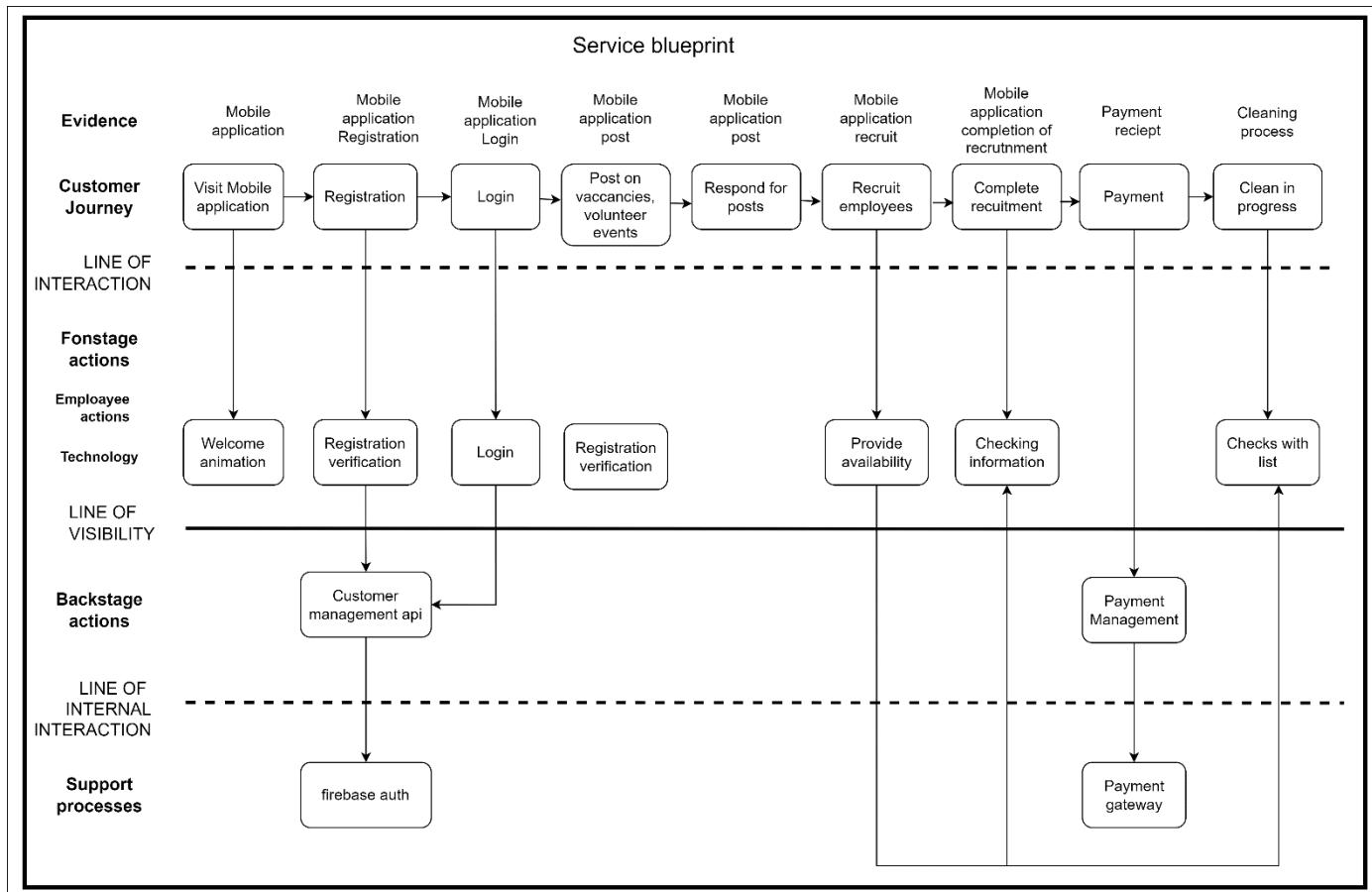


Figure 13– Service Blueprint

5 Milestone 2: Plan and conduct user research

5.1 Introduction

Each and every human being on the earth is having his own responsibility towards the environment. And also, people are in need of keeping the working environment clean where some other could earn an economical benefit there. Considering both the above requirements, this application is implemented as a platform that creates an exciting new initiative: pick up litter, encourage each other, and have fun while volunteering to make a difference for your community and the planet as well a platform for organizations to hire cleaning staff for their companies. This makes volunteering much more convenient and accessible to many people by using mobile as the platform. In the following sections we will discuss the usability testing process that was done in order to pinpoint those requirements, thus gathering the necessary information to improve the quality of the designed product. The goals of the usability testing include, establishing a baseline of users' requirements, validating user requirement measures and identifying potential design concerns.

5.2 Test Objectives

- Finding that people care about clean and health.
- Finding that people need this application in commercial purpose as well.
- Finding that people need this application in non-commercial purpose as well.
- Finding that people need more functionalities added hence they can use them in an effective way.
- Finding issues related to the lack of uniformity throughout the application
- Finding the issues related to improper usage of white space in similar applications.
- Finding issues related to long forms and lack of labels in forms in similar applications.
- Finding issues related to the functions not being available in similar applications.
- Finding design inconsistencies and usability problems in similar applications. (failure to locate and properly act on the errors due to labelling ambiguities)
- Establish a user performance baseline and satisfactory levels after using the application.

The above-mentioned areas will be mainly focused when usability testing the existing application in order to improve the user experience of the redesigned application and to find areas in which it is pos improved upon.

5.3 Methodology

In order to identify the pain points and to test the above hypothesis, a user research was conducted after selecting 2 people from the chosen list of personas. The user experience research methods that were chosen were user interviews and customer feedback gathered through a google form that was distributed. These methods were affordable, simple and effective with contrast to expensive methods such as usability lab studies or ethnographic field studies which either were much more expensive or time consuming.

5.4 Interview

- 2 people who best fit the personas were selected and interviewed online covering all the 4 functionalities of the 4 members.
- Each interviewee was interviewed by 2 members respectively.
- The interviews were recorded for further reference. (Since the interviews were conducted online it was much easier to record).
- While one member was interviewing, the other member took notes and made sure all the test objectives were covered in the interview.
- In order to make sure that all aspects of the test objectives were covered a script was prepared beforehand
- The questions that were asked in the interview were mostly closed-ended questions in order to focus on the issue directly at hand. But open-ended questions where the user can express their opinion were also asked.

5.5 Questionnaire

- A questionnaire was distributed which included mostly questions with quantitative answers so that it was easier to analyse the data
- The questionnaire was divided into 5 sections
- The first section was mostly to get an understanding about the users' demography
- In this section general questions such as age group and gender were asked to find out whether there was a correlation between the demography of the users and how they felt about the application
- The following sections covered the major 4 functionalities of the application and with the focus on the user requirement.

5.6 Procedure for the interview

- The participants were given a brief explanation about the application that was about to be implemented
- Several questions were asked from the participants to confirm whether they fit the demography of the persona.
- Then they were briefed about the tasks that were to be completed. The facilitators also informed the participants that they will be timed and evaluated on how effectively they manage to perform the task. They were also advised not to deviate from the task at hand and not side-track from the designated path to achieve the assigned task.
- The participants were encouraged to guide the team through their thought process while they were doing the tasks that a proper idea could be achieved
- All of the thoughts and the recording process was recorded.
- After the whole process was completed, several questions were asked from the employees to answer in retrospect.

5.7 Roles in the interviewing process

Facilitator

- They oversaw briefing the participants about the tasks
- They were also moderating the interview with the employee

Timer / data logger

- They oversaw finding out how much time it took for the user to complete a given task
- They also took notes and logged about the user's thought process.

Participant

- They were subjected to testing
- They provided their opinion on which areas could be improved.

In order to identify the requirements from a user's perspective, 2 interviews were conducted. The procedure and the code of conduct of the interview will be discussed in the section.

- The objective was mainly to get an understanding of the requirement that the stakeholders are having
- In order to do that a script was prepared covering all aspects of the functionalities that could be achieved within the system
- This included Registration with mobile number / login / Volunteering/ Recruiting / Organizing events/Recruit people etc.
- Both the interviews were conducted online using the zoom platform and was moderated by the team members themselves
- While the interview was being moderated by 2 of the members in the group, the other 2 members were recording and taking notes of the responses.
- Since the meeting was via zoom, it is easy to record for further referencing of the interviews

5.8 Interviewing

Interview 1:

<https://drive.google.com/drive/folders/1FSYr2KuJ4oIBCqYcEuhQMne3TNqgtXzX?usp=sharing>

Interview 2:

<https://drive.google.com/drive/folders/1-BaoY4NFEpPNM8WOEymANIZC4xgp3ROK?usp=sharing>

Interview 3:

<https://drive.google.com/drive/folders/1uPdssi5igbRawBN0il4DVrAyAAdz3vYi?usp=sharing>

Interview 4:

<https://drive.google.com/drive/folders/1SFVAne71J33DVrbN7leFkcQR6tgDqhcS?usp=sharing>

In order to identify the pain points from a user's perspective, 4 interviews were conducted. The procedure and the code of conduct of the interview will be discussed in the section.

- The objective was mainly to get an understanding of the requirement that a general user of the application needs.
- In order to do that a script was prepared covering all aspects of the functionalities that could be achieved within the system
- This included Registration with mobile number / login / post sharing/ vacancy applying, recruitment process etc.
- Each the interview was conducted online using the MS team's platform and was moderated by the team members themselves

5.8.1 Interview 1 script (Thanushi)

```
*Que - Notepad
File Edit View

--Welcome the user
-- Questions to get an understanding of the users demography
*Tell us a bit about your self?
*Have you join any volunteer programme before? If so how did you join them?
*Have you used an application for the volunteer programmes before?
* If so can you describe your experience while using application?

-- Questions to get an understanding about how the user felt about lack of ignorance about volunteering programs

* Did you find any difficulty with connecting to the projects?
* If so how did you get to resolve that difficulty?
* If we are implementing a platform to make connectivity what do you prefer to include in it?

-Project details
-Number of participants
-venue, date and time
-benefits of the projects

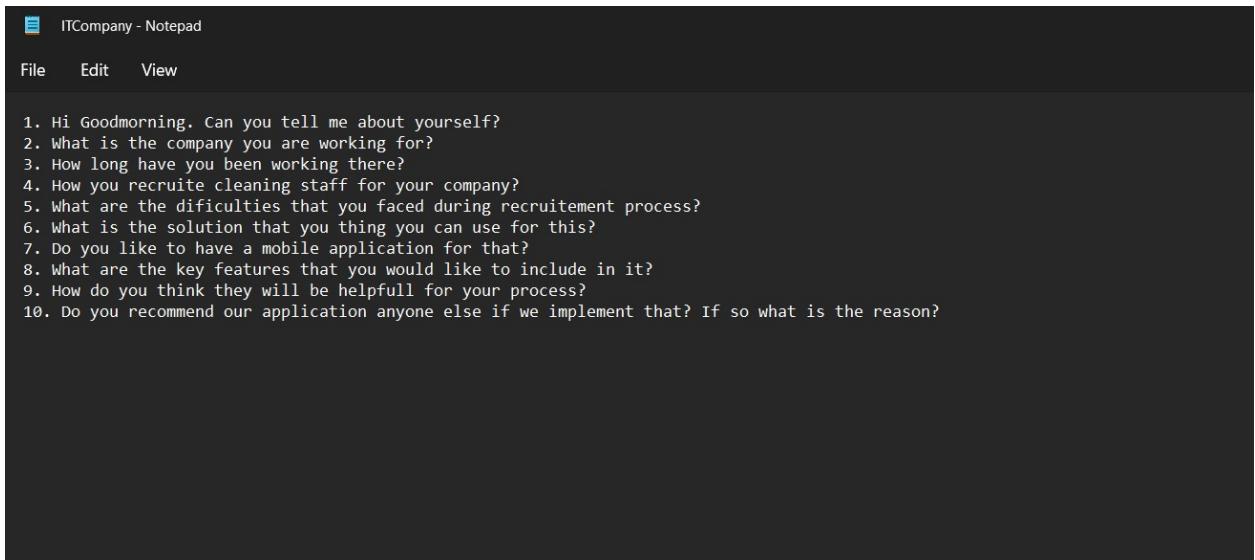
-- Question to get an understanding about how the user felt about connecting to the other volunteers

*Next we will ask you some general questions regarding connecting to the other volunteers
*Can you describe your experience with engaging with other volunteers
*Did you find it easy to get to know about their projects
*Did you find any difficulty when contacting them?
*What is the way that you think we should create a platform for this problem?
*Do you think that this will be a good platform to contact other volunteers?
*What are the benefits do you think that we can get from this?

S
```

Figure 14 – Interview – Script 01

5.8.2 Interview 2 script (Shehan)



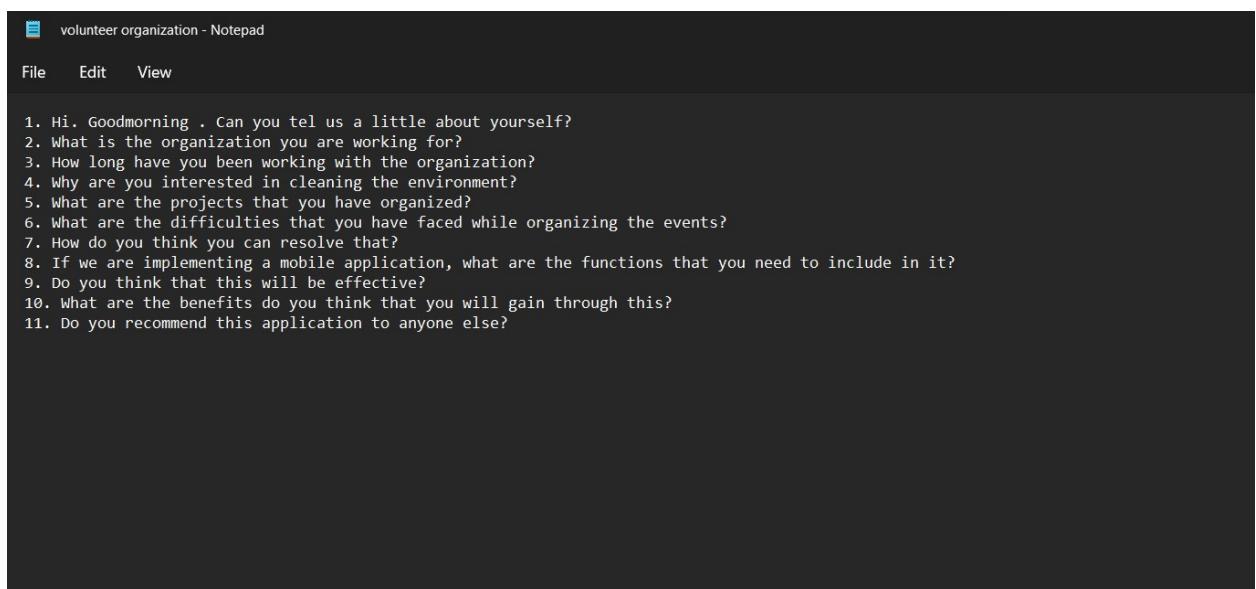
ITCompany - Notepad

File Edit View

```
1. Hi Goodmorning. Can you tell me about yourself?  
2. What is the company you are working for?  
3. How long have you been working there?  
4. How you recruite cleaning staff for your company?  
5. What are the dificulties that you faced during recruiement process?  
6. What is the solution that you thing you can use for this?  
7. Do you like to have a mobile application for that?  
8. What are the key features that you would like to include in it?  
9. How do you think they will be helpfull for your process?  
10. Do you recommend our application anyone else if we implement that? If so what is the reason?
```

Figure 15 – Interview – Script 02

5.8.3 Interview 3 script (Hirusha)



volunteer organization - Notepad

File Edit View

```
1. Hi. Goodmorning . Can you tel us a little about yourself?  
2. What is the organization you are working for?  
3. How long have you been working with the organization?  
4. Why are you interested in cleaning the environment?  
5. What are the projects that you have organized?  
6. What are the difficulties that you have faced while organizing the events?  
7. How do you think you can resolve that?  
8. If we are implementing a mobile application, what are the functions that you need to include in it?  
9. Do you think that this will be effective?  
10. What are the benefits do you think that you will gain through this?  
11. Do you recommend this application to anyone else?
```

Figure 16 – Interview – Script 03

5.8.4 Interview 4 Script (Thisara)

- While the interview was being moderated by 2 of the members in the group, the other 2 members were recording and taking notes of the responses.
- Since the meeting was via MS Teams, it is easy to record for further referencing of the interviews

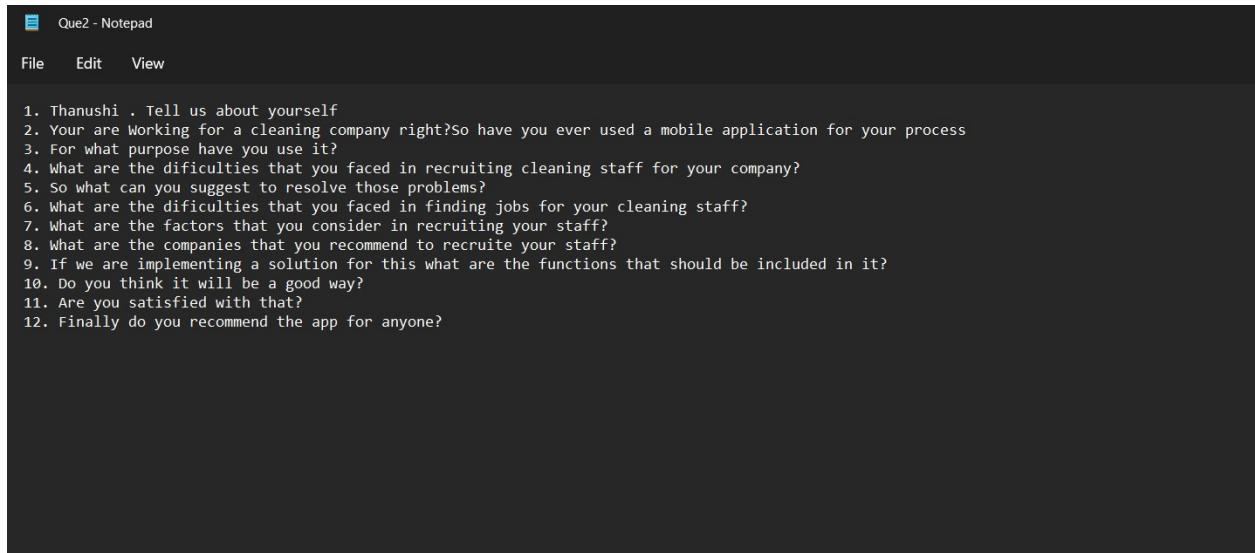


Figure 17 – Interview – Script 04

5.9 Questionnaire

App testing:

<https://forms.gle/kd36jzG9qy9Wv7mCA>

Thought process behind making the question.

- The questionnaire is divided into 5 sections
- The first section contains questions to get a demography of the user

Demographic questions

- In order to get an understanding about the user's demography questions such as
 - Age group
 - Gender
 - Education level
- By getting the qualitative categorical data, it is possible to find whether there is a correlation between them and the satisfaction levels.

Section on volunteers

- This section was specifically designed to address the volunteer experience on cleaning projects which they were involved with
- Here, mostly scale variables were taken to quantitatively analyse the experience.

Section on volunteer organizations

- In this section the experiences of the members of volunteer organizations who organized cleaning events were explored.
- In here they were also asked about the efficiency of using a mobile application to fulfil their need as they think

Section on cleaning companies

- In this section mostly, questions regarding cleaning companies were asked.
- Also issues that they face in physical mode were asked here.
- Also, how the procedure of recruitment is done was explored.

Section on recruiting companies

- In this section the issues related to recruiting companies were explored.
- In here they were also asked what the recruitment process is and how it is possible and easy using a mobile application.

5.10 Participant Profiles

<<This is where you include information about your test participants and ensure that they match the user personas of the product you will be testing.

Note: in most cases participants will remain anonymous, so ensure that you do not include any names or personal information.>>

The table below provides a breakdown of the participants selected for testing:

Name	Demography	Location, Date and Time
<i>U_0001</i>	<i>1. Undergraduate 2. Between the age group of 20-30 3. Loves volunteering 4. Volunteer a lot during the vacations and free times 5. Mostly like to figure out events online</i>	<i>MS Teams platform 24 / 9 / 2022</i>
<i>U_0002</i>	<i>1. Secretary of a volunteer organization 2. Between the age group of 25-35 3. Organizes volunteer events 4. Uses mobile applications to get most of their tasks done</i>	<i>MS Teams platform 24 / 9 / 2022</i>
<i>U_0003</i>	<i>1. Manager of a cleaning company 2. Between the age group of 25-35 3. Recruit people for cleaning services 4. Uses mobile applications to get most of their tasks done</i>	<i>MS Teams platform 24 / 9 / 2022</i>
<i>U_0004</i>	<i>1. Manager of a IT company 2. Between the age group of 25-30 3. Recruit people to get done their cleaning services 4. Uses mobile applications to get most of their tasks done</i>	<i>MS Teams platform 24 / 9 / 2022</i>

Plan for Data analysis

The interview was conducted in such a way that mostly close ended questions and questions where answers were quantitative were asked with some questions where the user can provide their opinion

- *The data that will be collected from the interviews are scrutinized after rewatching the interview video and the data is entered into a data analysis software (Microsoft excel).*
- *The Excel software was used for its ease of data analysis and graphing capabilities*
- *The qualitative data were refactored first, and variables were properly organized.*
- *The quantitative data were graphed in a histogram to analyze*
- *2-way frequency tables were used to analyze combination of categorical variables.*
- *Stacked bar charts were also used.*
- *Other than that Pie charts and other graphical methods were also use.*
- *Excels analyze function were also used*

6 Milestone 3: Verify the key-user flow(s)

Member	Registration Number	Fail/Blocking points
Perera E.T.N.	IT20639112	<ul style="list-style-type: none"> • Lack of a proper bottom navigation and nested level of UIs in the side navigation makes it hard for the user to achieve even small tasks such as finding volunteer events and discovering volunteer event full details • Information is clustered together, and whitespace isn't properly used in the application. Therefore, it is hard for the user to focus on the main tasks in the system • Improper usage of typography (font family, size, weight...)
Liyanage G.L.S.E.	IT20645052	<ul style="list-style-type: none"> • Lack of uniformity throughout the application and a proper usage of icons. <p>Lack of labels/ place holders in forms making it hard for the user to interact with forms</p>
Kavinda A.A.T.	IT20649562	<ul style="list-style-type: none"> • Lack of sign in and session management makes it hard for the user to achieve tasks within the application • Issues with finding vacancies and navigation

Nanayakkara M.A.H.R.	IT20659158	<ul style="list-style-type: none">• Forms have a lot of information to be input by the user and very little sliders and dropdowns increasing the places where users can make mistakes• Issues with improper use of colour science and contrast in the application hiding vital information which are supposed to be highlighted
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7 Milestone 4: Sketching

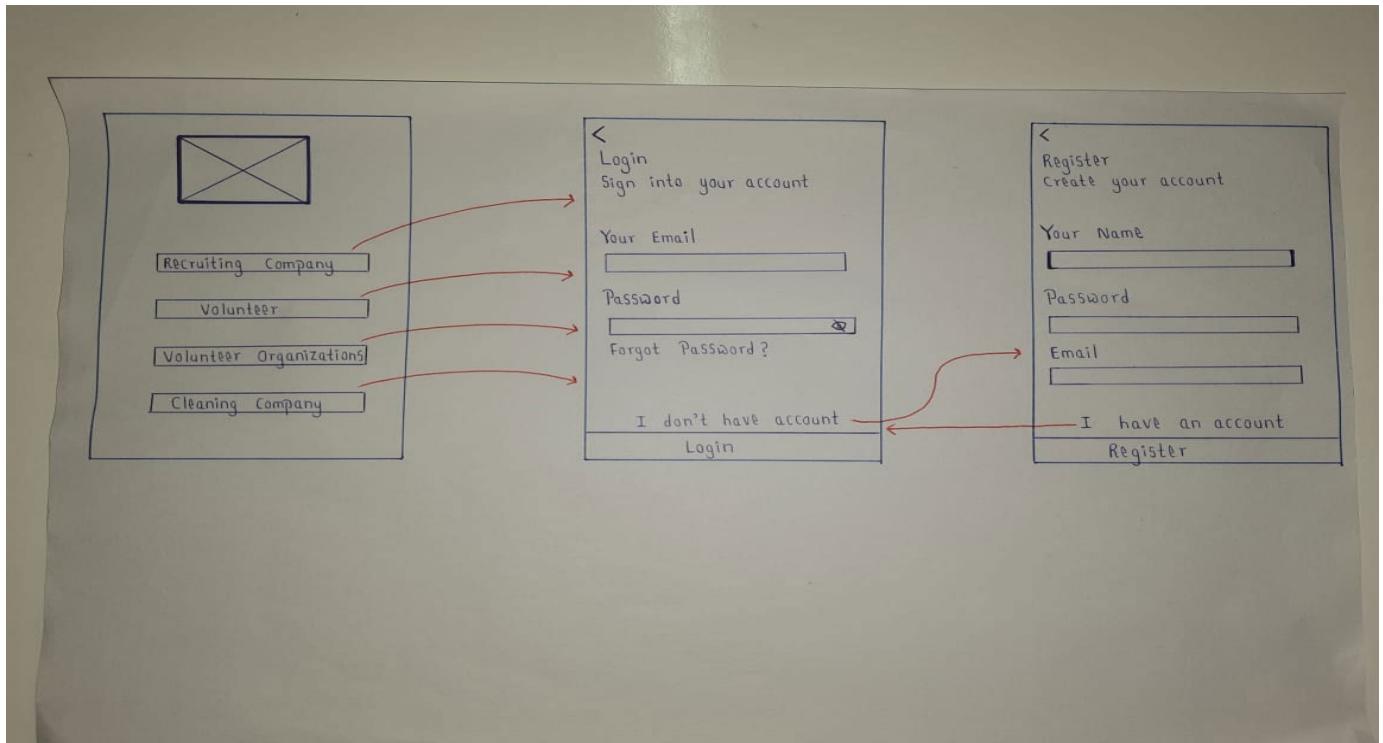


Figure 18 –Sketching - 01

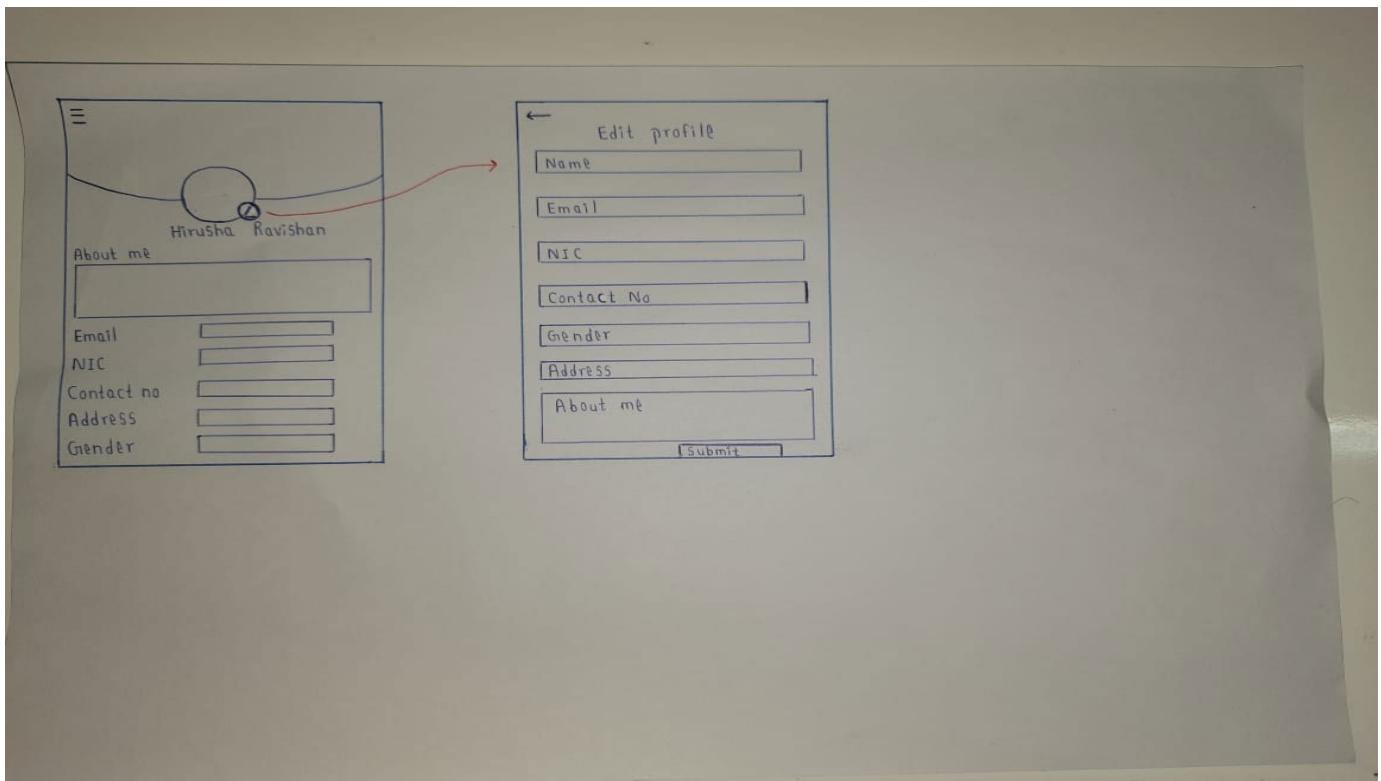


Figure 19 –Sketching - 02

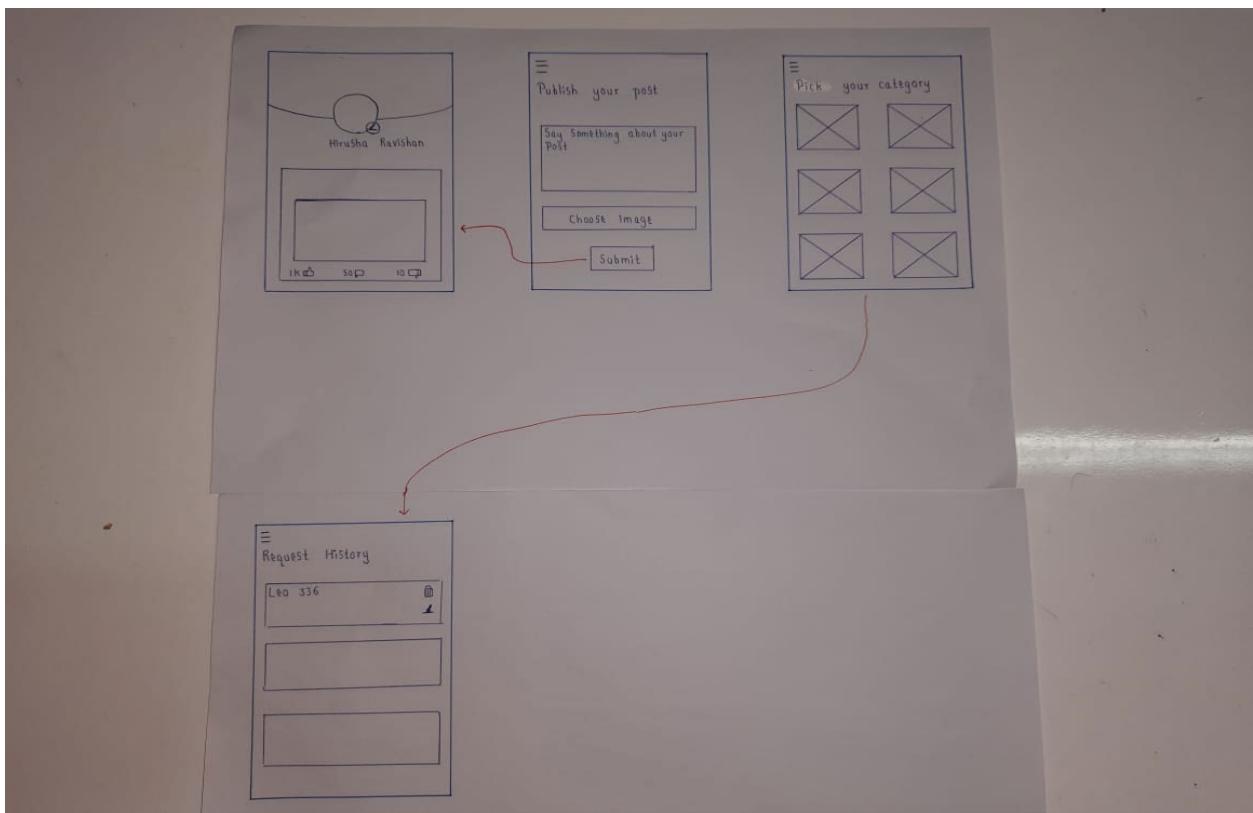


Figure 20 –Sketching - 03

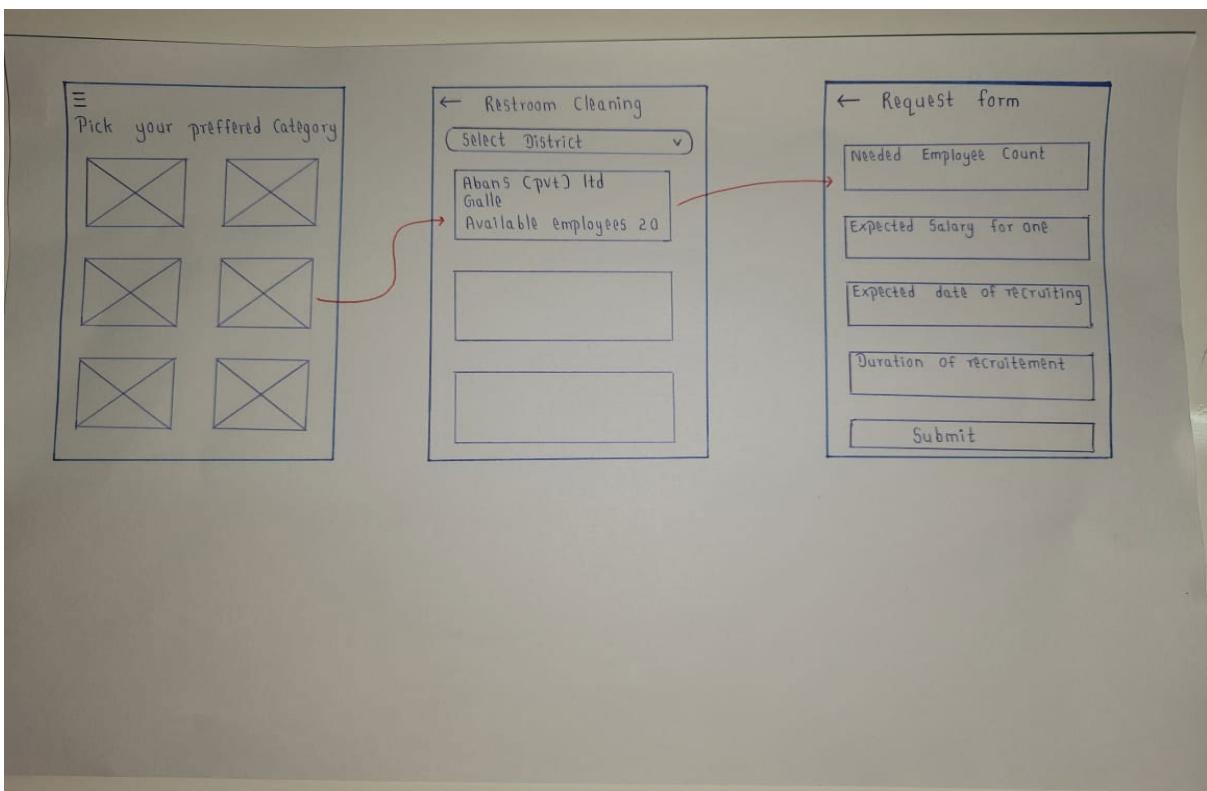


Figure 21 –Sketching - 04

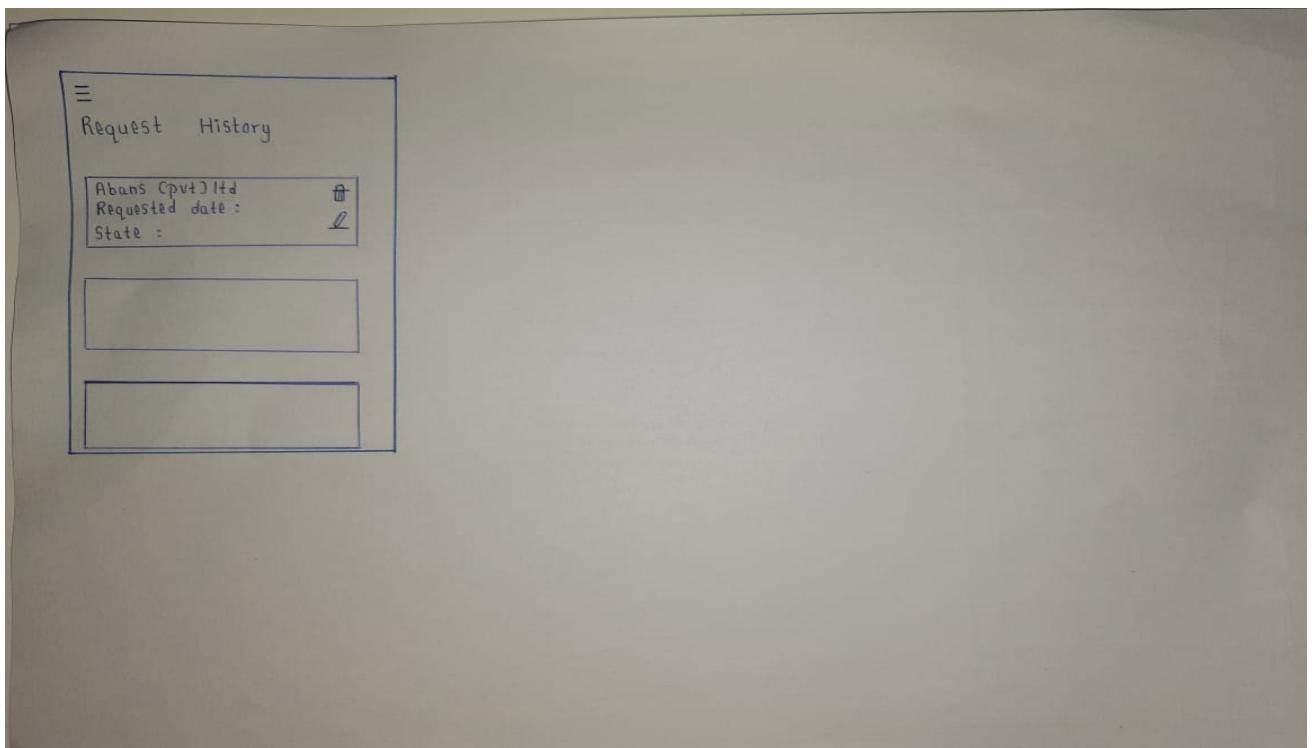


Figure22–Sketching - 05

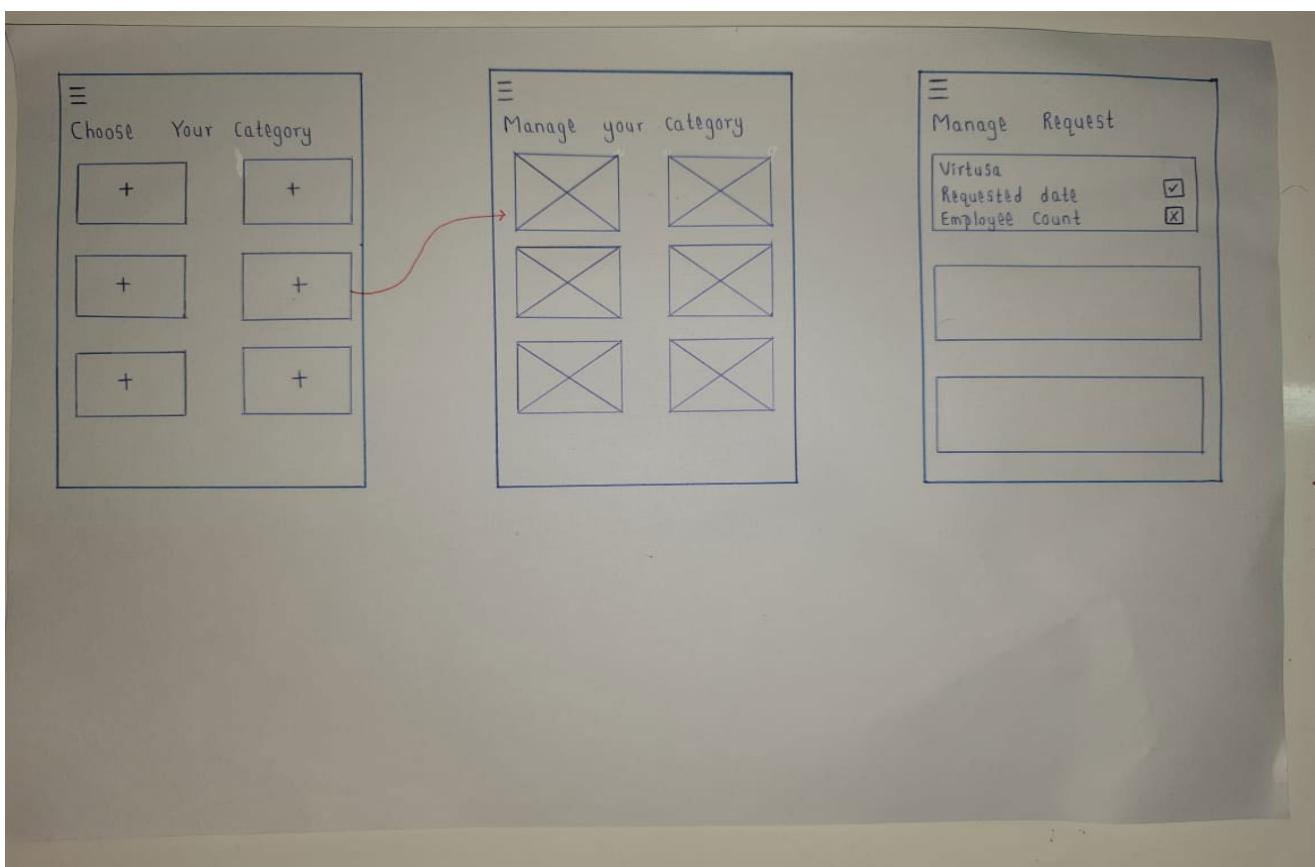


Figure 23 –Sketching - 06

8 Milestone 5: Wireframes, Prototype

8.1 Wireframes

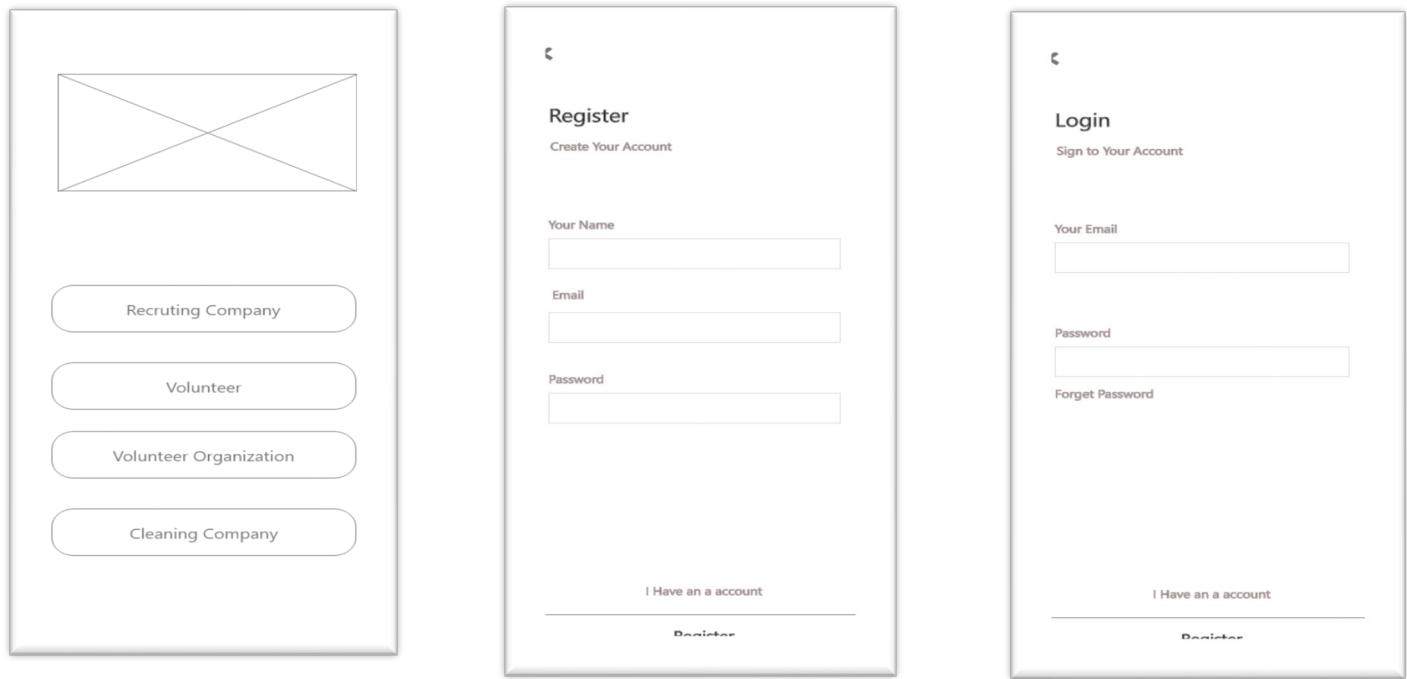
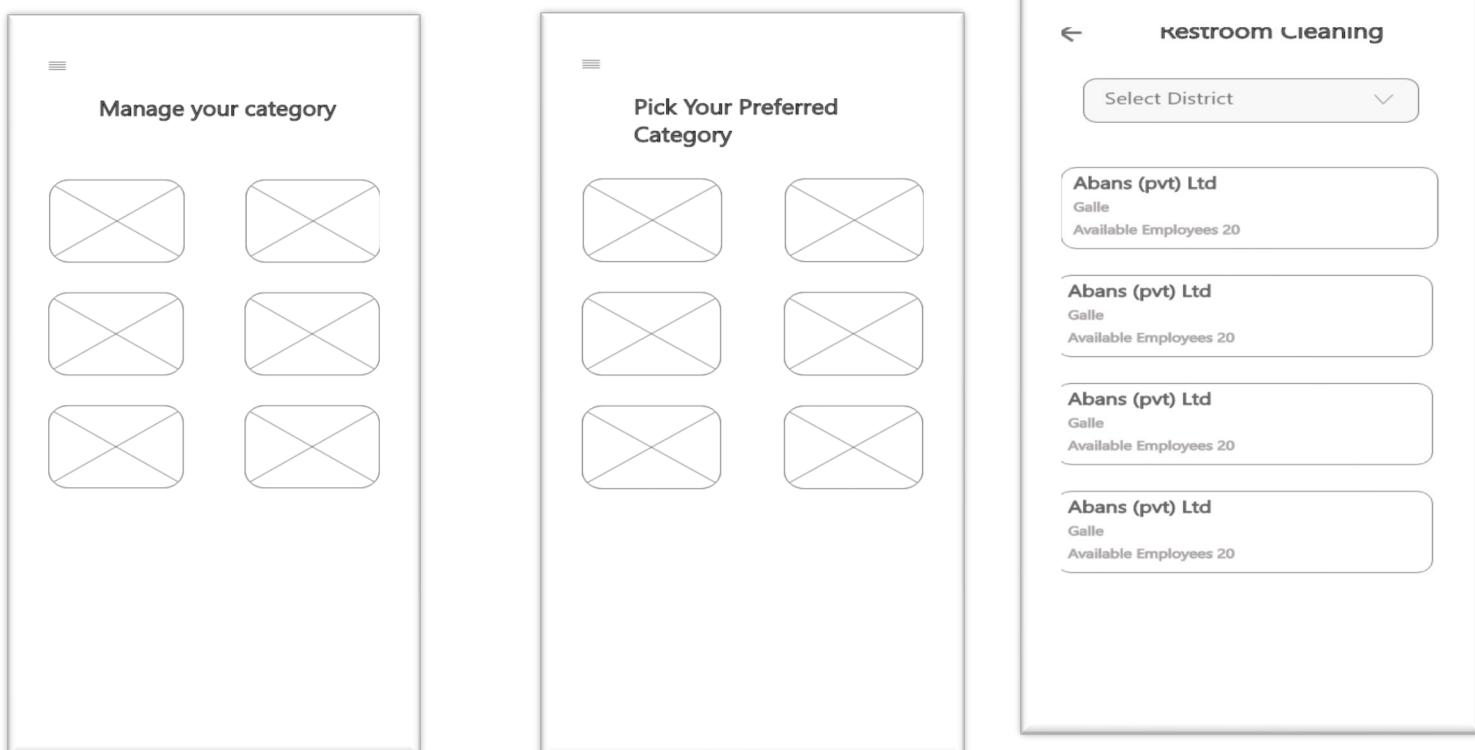


Figure 24 –Wireframe 01,02,03,04,05



The wireframe illustrates three screens of a mobile application:

- Request Form**: A screen for submitting a new request. It contains four input fields:
 - Needed Employee Count: 5
 - Needed Employee Count: 3000.00
 - Needed Employee Count: 02-11-2022
 - Needed Employee Count: 30A large "Submit" button is at the bottom.
- Request History**: A screen displaying a list of previous requests. Each item shows the company name, request date, state, and two delete icons.
 - Abans (pvt) Ltd: Request date: 02-10-2022, State: Pending
 - Abans (pvt) Ltd: Request date: 02-10-2022, State: Done
 - Abans (pvt) Ltd: Request date: 02-10-2022, State: Pending
- Manage Request**: A screen displaying a list of requests for review. Each item shows the company name, request date, employee count, and two delete icons.
 - Virtusa: Request date: 02-10-2022, Employee Count: 10
 - Virtusa: Request date: 02-10-2022, Employee Count: 10
 - Virtusa: Request date: 02-10-2022, Employee Count: 10

Figure 25 –Wireframe 06,07,08

Choose Your Category










Manage Your Category










Publish Your event

Say Something about post

test project this is

Event date

02-11-2022

Event Category

Educational Event

Choose Image

Submit

Manage Request

Hirusha

Request date : 02-10-2022

Colombo

Kamal

Request date : 02-10-2022

Galle

Nilmi

Request date : 02-10-2022

Kandy

Hirusha Ravishan

Hirusha Ravishan

"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.Ut enim ad minim veniam,



Publish Your Post

say something about the post

"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.Ut enim ad minim veniam,

CHOOSE IMAGE

Submit

Figure 26 – Wireframe 09,10,11,12,13,14

41

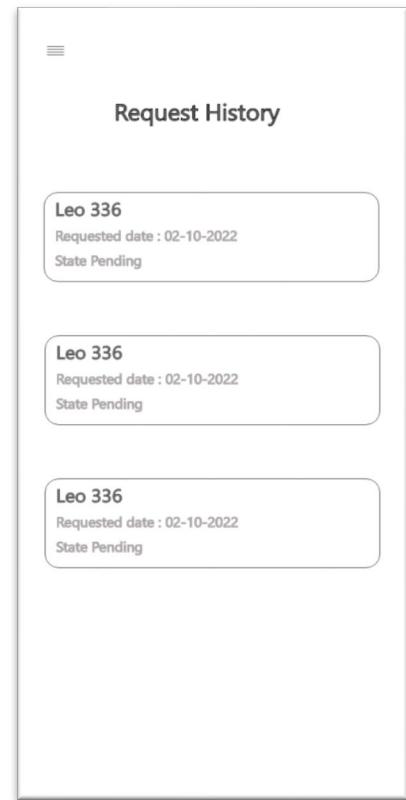
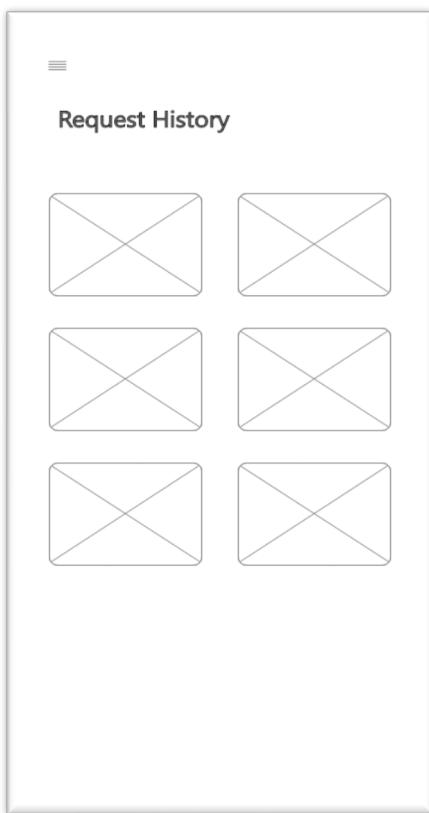
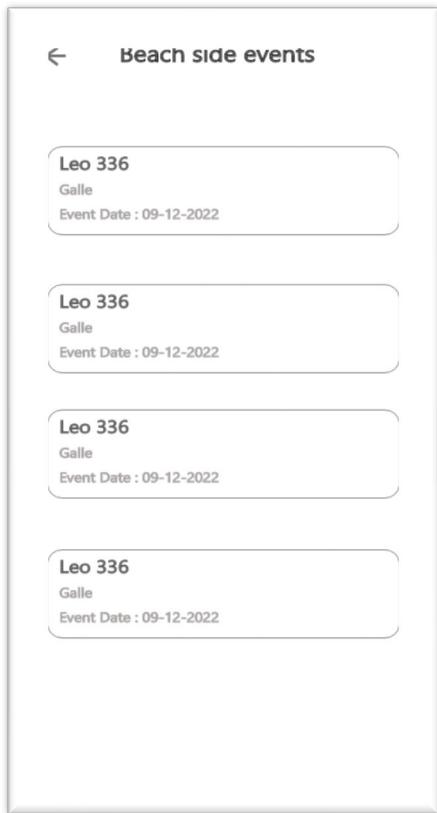


Figure 27 –Wireframe 15,16,17

8.2 Wireframes

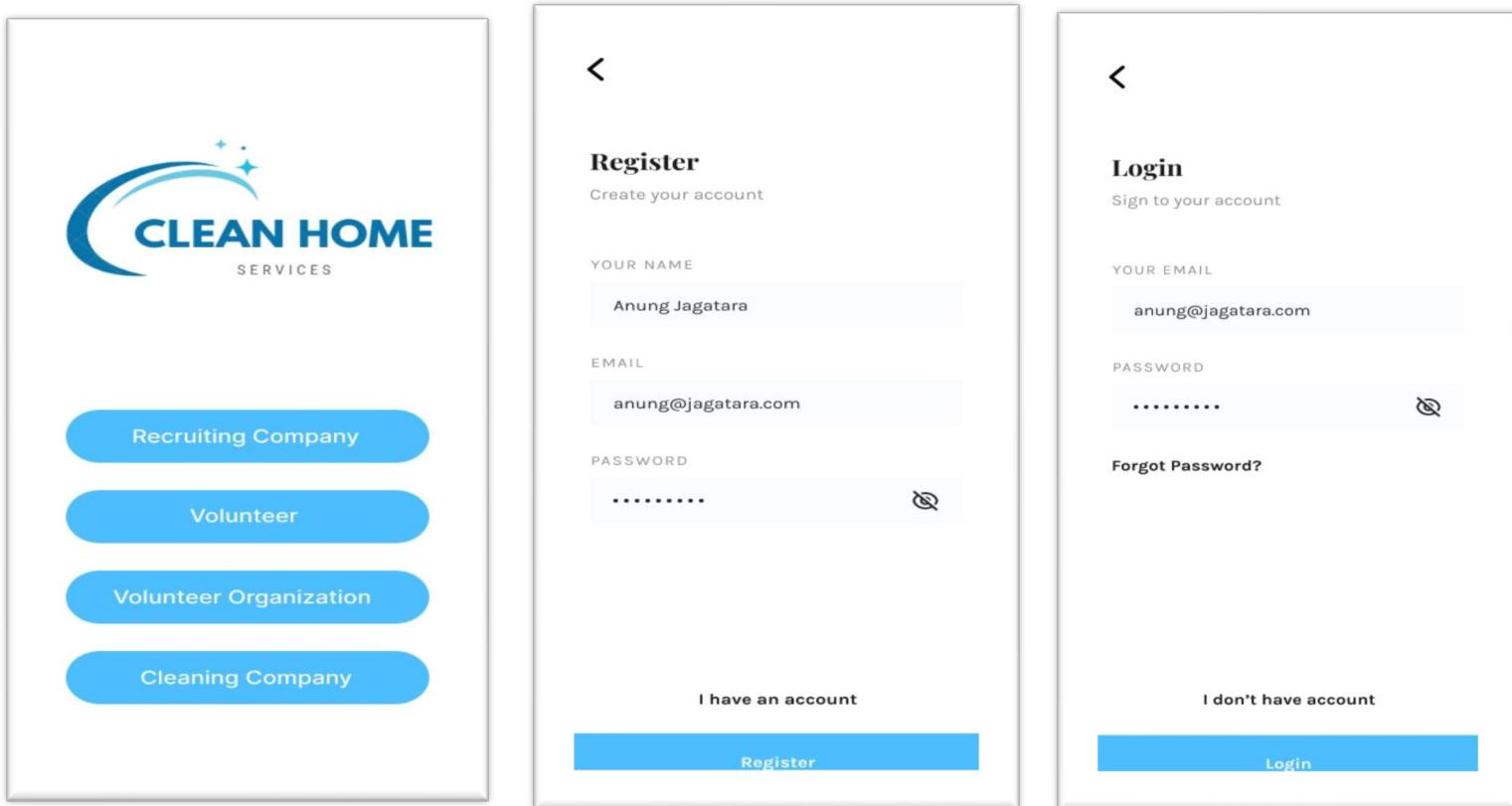


Figure 28–Wireframe 18,19,20

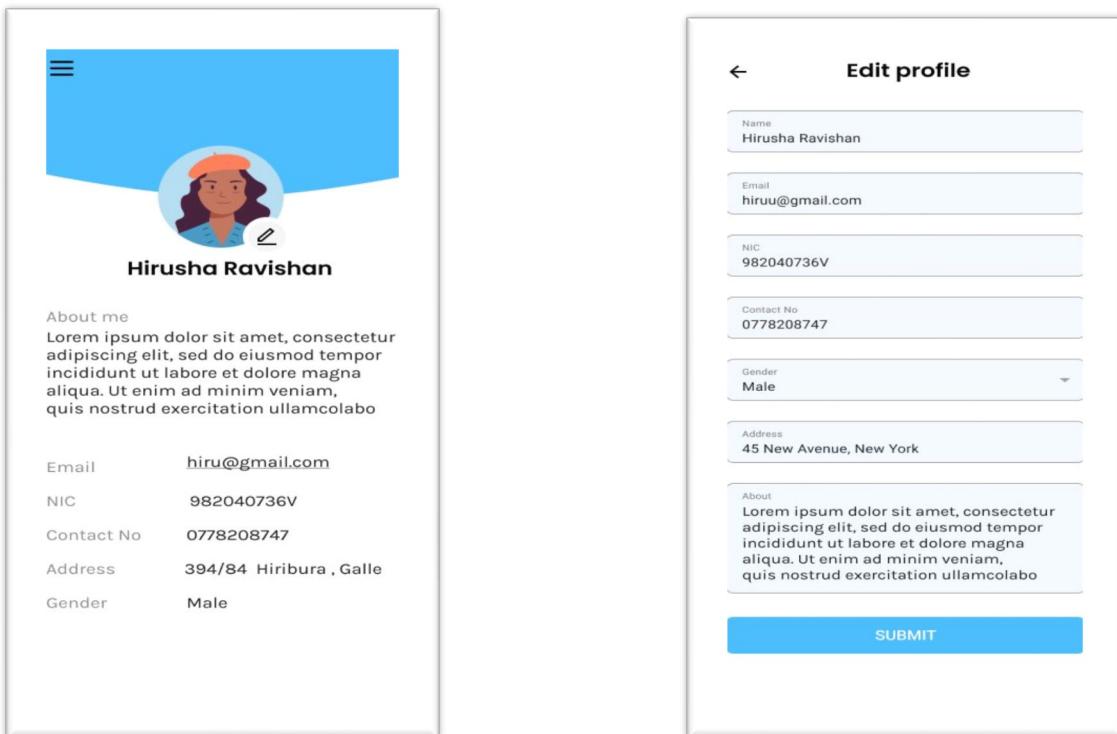


Figure 29 –Wireframe 21,22

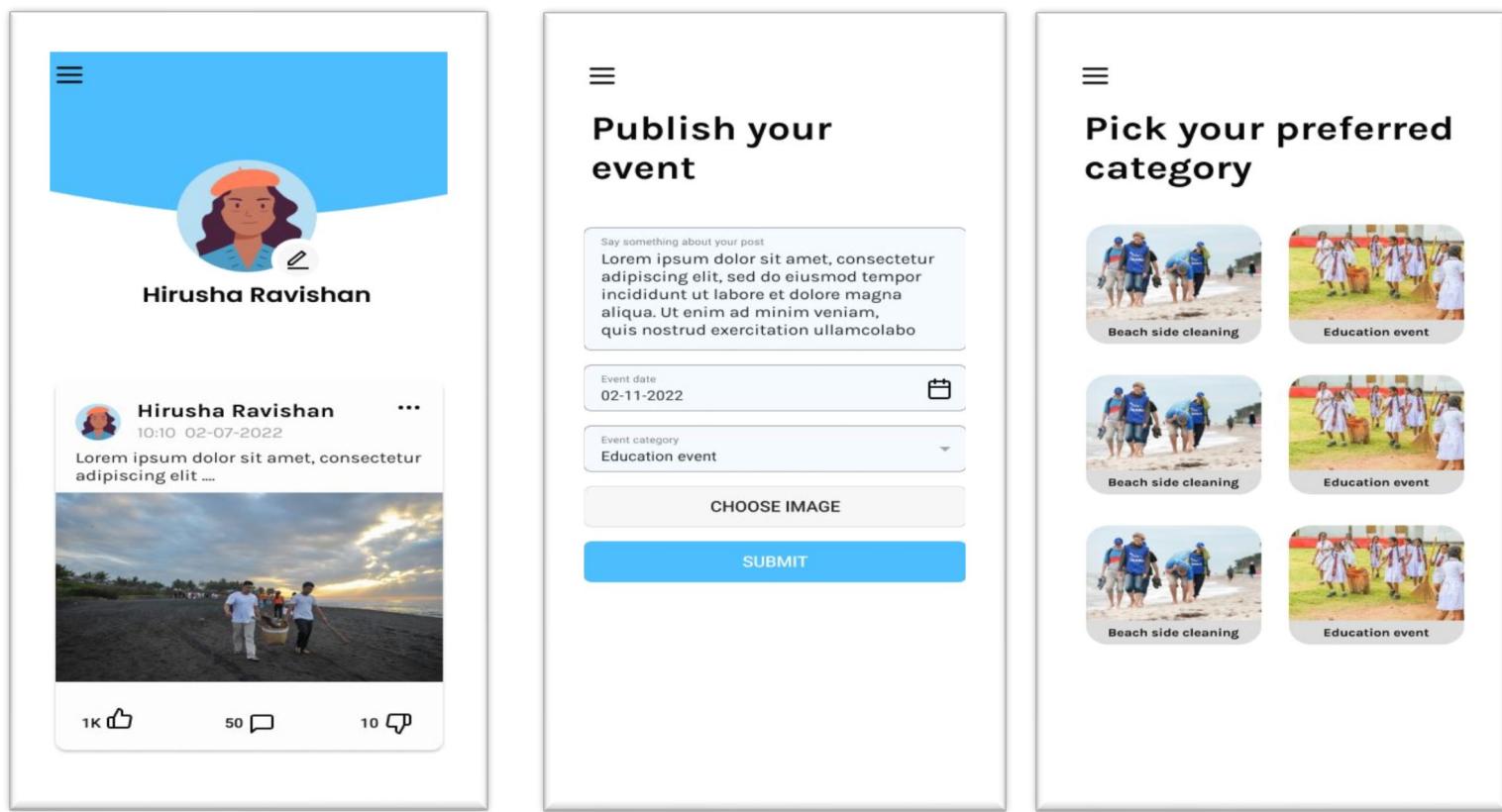


Figure 30– Wireframe 23,24,25

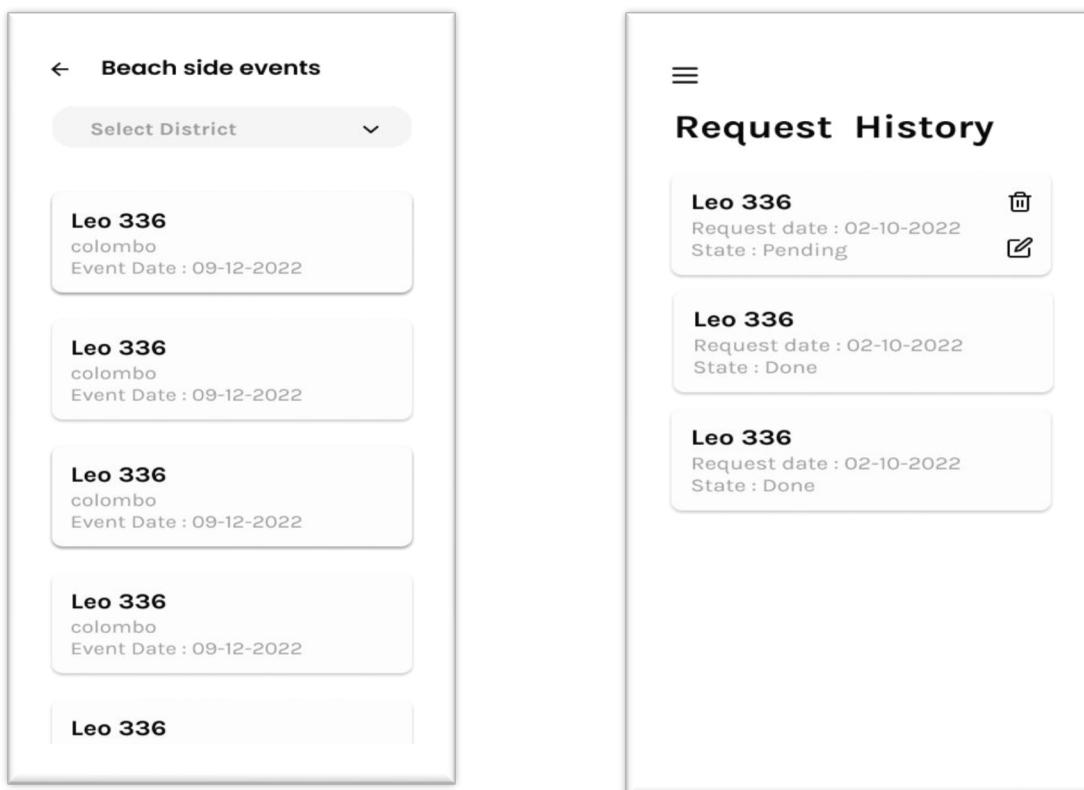


Figure 31 –Wireframe 26,27

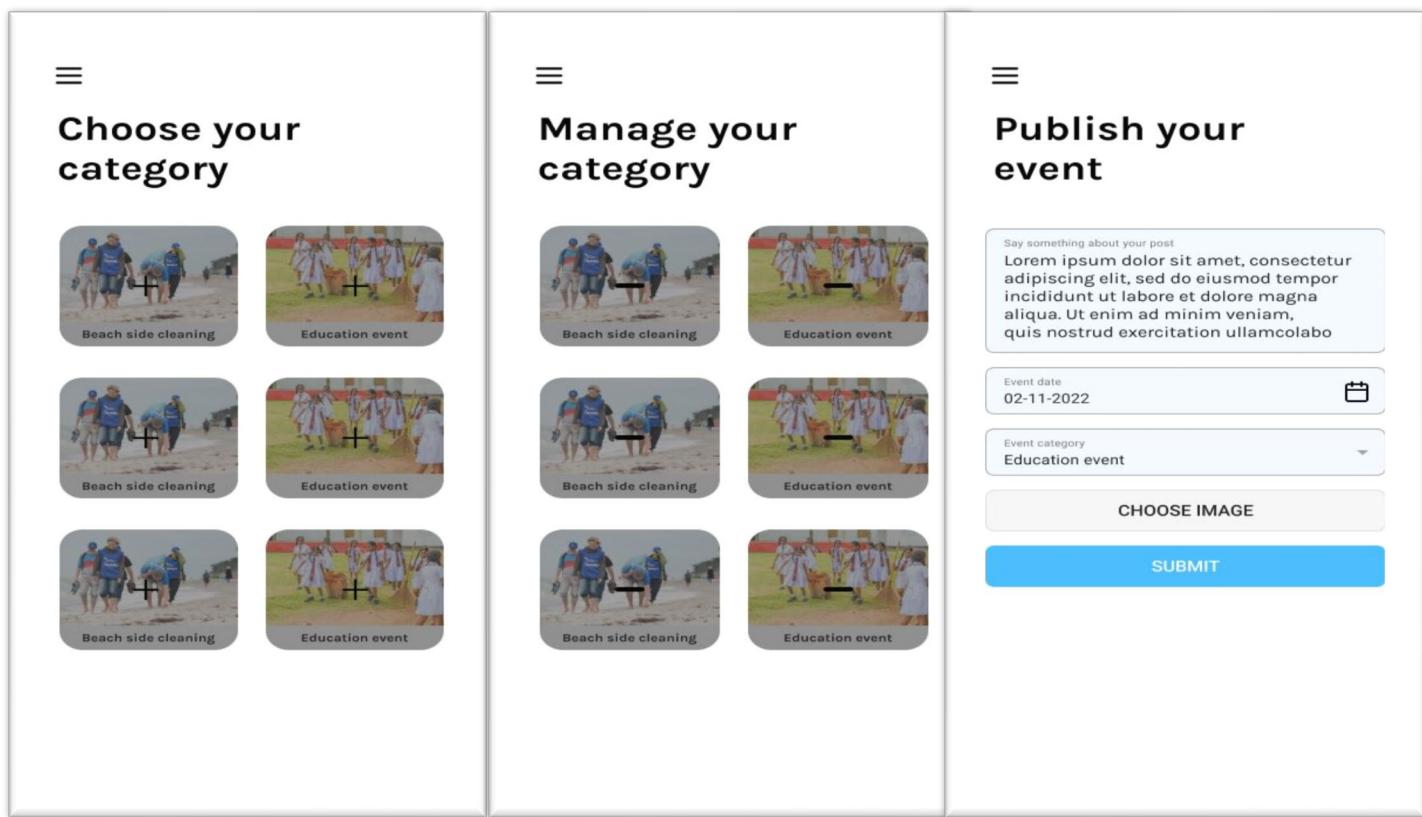


Figure 32 – 28,29,30

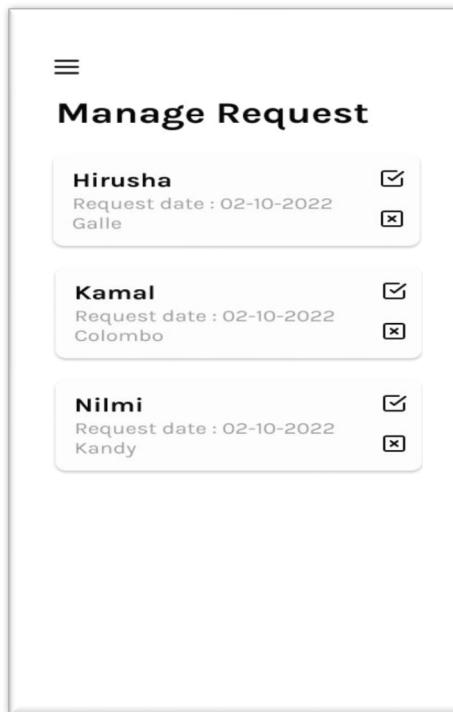


Figure 33 – 31

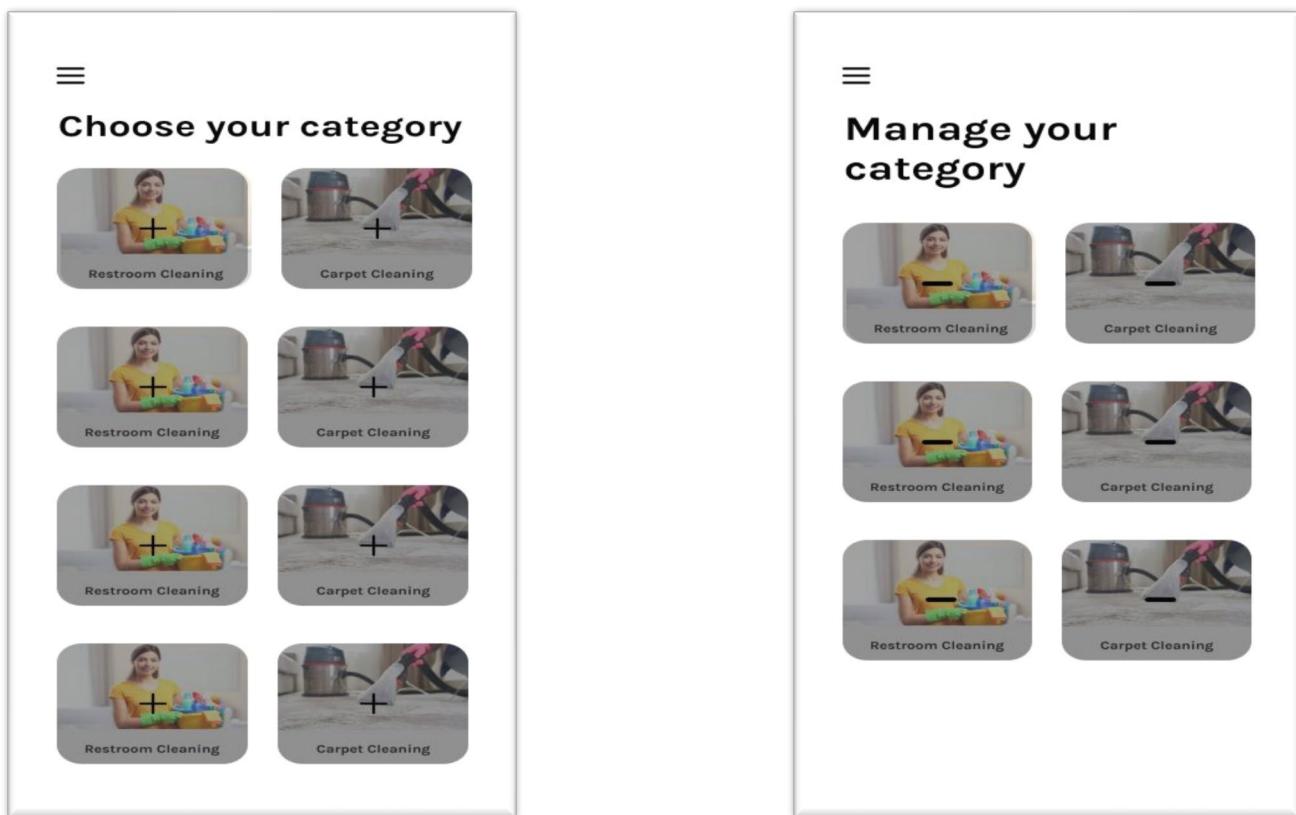


Figure 34– 32,33



Figure 35 – 34

8.3 High Fidelity Prototype

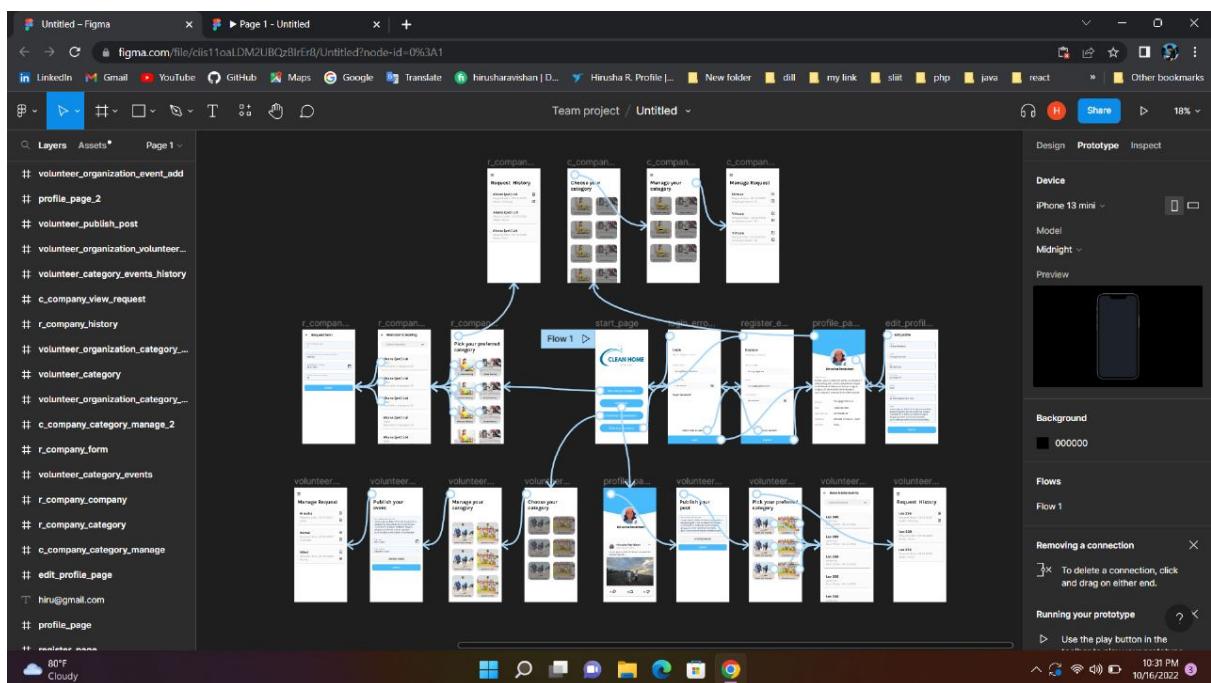


Figure 36 – High Fidelity Prototype

9 Milestone 6: User Feedback for your Prototype

The image shows two wireframes side-by-side. On the left is the 'Register' screen, which has a back arrow at the top, the title 'Register', and the subtitle 'Create your account'. It contains four input fields: 'Your Name', 'Email', 'Password', and 'Re Enter Password'. Below these is a link 'I have an account' and a blue rounded rectangular button labeled 'REGISTER'. On the right is the 'Login' screen, which also has a back arrow at the top, the title 'Login', and the subtitle 'Sign in to your account'. It contains two input fields: 'Email' and 'Password'. Below these is a link 'I don't have an account' and a blue rounded rectangular button labeled 'LOGIN'.

Figure 37 – Wireframe change 01,02

10 Milestone 7: Implementation

https://github.com/SLIIT-FacultyOfComputing/final-project-uee_fp_sej004

11 Requirement Specification

11.1 Usability Goals

1. Effective
2. Efficient
3. Engaging
4. error tolerant
5. easy to learn

11.2 User Experience Goals

1. Satisfying
2. Clear language
3. Informative feedback
4. Consistent
5. Enjoyable

11.3 Functional Requirements

1. Volunteers are able to register to the system and login into the system using their credentials. They are able to select a category and find volunteer events for him. They are able to post on the events that they were engaged before. And also they can contact and get committed with the other volunteers as well.
2. Volunteer organizations are able to register to the system and login into the system using their credentials. They are able to select a category and post volunteer events that they are going to be held. They are able to post on the events that they had organized before. And also they can contact and get committed with the volunteers as well.
3. Cleaning companies are able to register to the system and login into the system using their credentials. They are able to select a category and add the available count of employees they are having. And also they can view the previously received requests as well. They are able to accept or decline the requests.
4. Recruiting companies are able to register to the system and login into the system using their credentials. They are able to select a category and request for cleaning staff they are in need of. And also they can view the previously sent requests as well. They are able to accept or decline the requests.

11.4 Non-Functional Requirements

1. Scalability
2. Reliability
3. Regulatory
4. Maintainability
5. Serviceability
6. Utility
7. Security
8. Manageability
9. Data integrity
10. Capacity
11. Availability
12. Usability
13. Interoperability
14. Environmental

12 Project Management

12.1 Meetings

The meetings were conducted through MS teams and zoom platforms. Sometimes WhatsApp was also used. We had meetings for once a 2-3 days and progress was discussed among the members.

12.2 Risk Management

The risk that considered was the data privacy.

12.3 Milestones

The screenshot shows a GitHub repository page for 'SLIIT-FacultyOfComputing / final-project-uee_fp_sej004'. The repository is private and was generated from SLIIT-FacultyOfComputing/UEE_FP_2022. The 'Code' tab is selected, showing a list of commits. A commit by 'Thanushi-Perera' titled 'code submit' is highlighted, dated 1 hour ago. The commit message is 'GitHub Classroom Feedback'. Below this, there is a list of milestones: Milestone 01 (Create Milestone 01.zip), Milestone 02 (Create SEJ004_Milestone_02.pdf), Milestone 03 (Milestone03), Milestone 04 (Create SEJ004_Milestone_04.pdf), Milestone 05 (Add files via upload), Milestone 06 (Initial commit), and Milestone 07 (code submit). The README.md file is also visible. On the right side of the page, there are sections for 'About', 'Releases', 'Packages', 'Contributors', and 'Languages'. The 'About' section shows the repository was created by GitHub Classroom. The 'Languages' section indicates Java 100.0%.

Figure 38 – Milestone image

13 Conclusion

This application is implemented with the intention of having a sustainable cities and community. In the modern world, with the fast-growing technological background, people are less careful on the environment. Specially with the increasing population which goes hand in hand with the reduction of lands have made people in to a trouble with a cleaning environment. In order to solve this, the businessmen have taken the power into their hands by instantiating cleaning companies which recruits cleaning staffs for others. And also, the volunteering organizations such as Rotaract, Leo, AISEC, IEEE and etc. organize the cleaning events and volunteers all around the world are engaging with them.

For the above scenarios, the main problem they are having is communication. Without having a proper communication method, all the stakeholders in this scenario face a lot of problems. So, as a solution for the above situation, a mobile application is developed which is called as "Clean Home". It enables all the stakeholders (Volunteers, Volunteer organizations, Cleaning companies, Recruiting companies) to login to the mobile application and proceed the functions.

Appendix

13.1 Initial User Survey Responses

<https://forms.gle/kd36jzG9qy9Wv7mCA>

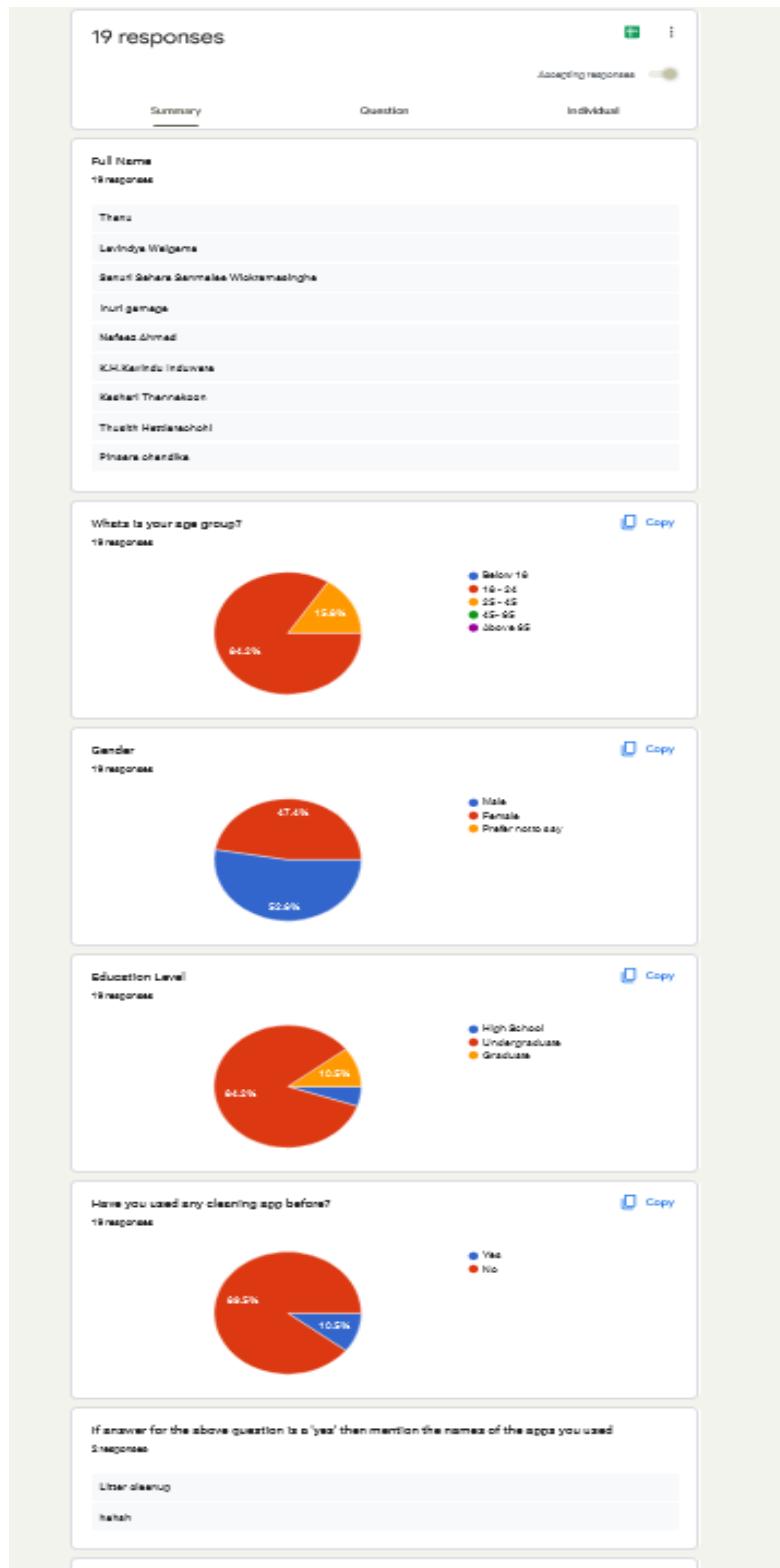


Figure 39 – Survey Responses

13.2 Meeting Minutes

Interviewing

Interview 1:

<https://drive.google.com/drive/folders/1FSYr2KuJ4oIBCqYcEuhQMne3TNqgtXzX?usp=sharing>

Interview 2:

<https://drive.google.com/drive/folders/1-BaoY4NFEpPNM8WOEymANIZC4xgp3ROK?usp=sharing>

Interview 3:

<https://drive.google.com/drive/folders/1uPdssi5igbRawBN0il4DVrAyAAdz3vYi?usp=sharing>

Interview 4:

<https://drive.google.com/drive/folders/1SFVAne71J33DVrbN7IeFkcQR6tgDqhcS?usp=sharing>

Prototype v.02

https://mysliit-my.sharepoint.com/:v/g/personal/it20645052_my_sliit_lk/EfL2uakseINPrYeekIq7DNYBliESoz8f2cTi2vCmRGag1A?e=ekGwPN

13.3 Links to Google Docs / MS Teams

<https://forms.gle/kd36jzG9qy9Wv7mCA>

13.4 Contribution Table

IT Number	Name	Contribution
IT20639112	E.T.N Perera	All functions regarding Volunteer <ul style="list-style-type: none"> • Apply for events • Select category • Request history • Upload posts • Edit profile
IT20645052	G.L.S.E Liyanage	All functions regarding Volunteer Organizations <ul style="list-style-type: none"> • Publish events • Select category • Manage requests • Edit profile
IT20659158	Nanayakkara M.A.H.R.	All functions regarding Cleaning companies <ul style="list-style-type: none"> • Select category • Manage company details • Manage requests
IT20649562	Kavinda A. A.T.	All functions regarding Recruiting companies <ul style="list-style-type: none"> • Select category • Request for employees • Publish posts