



Sri Lanka Institute of Information
Technology

SE3050 – User Experience Engineering

Milestone 02

Project ID: SEJ004

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Folders containing interviews / video conference : <https://drive.google.com/drive/folders/1S-B1KCgmgGnprbkQR0FrstKjJGozQAx?usp=sharing>

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.

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.

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.

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.

Questionnaire

- A questionnaire was distributed which included mostly questions with quantitative answers so that it was easier to analyze 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.

Procedure for the interview

- The participants were given a brief explanation about the application that was about to be implement
- 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 was 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.

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

Interviewing

Interview 1:

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

Interview 2:

<https://drive.google.com/drive/folders/1-BaoY4NFEpPNM8WEOEymANIZC4xqp3ROK?usp=sharing>

Interview 3:

<https://drive.google.com/drive/folders/1uPdssi5iqbRawBN0il4DVrAyAAdz3vYi?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

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?

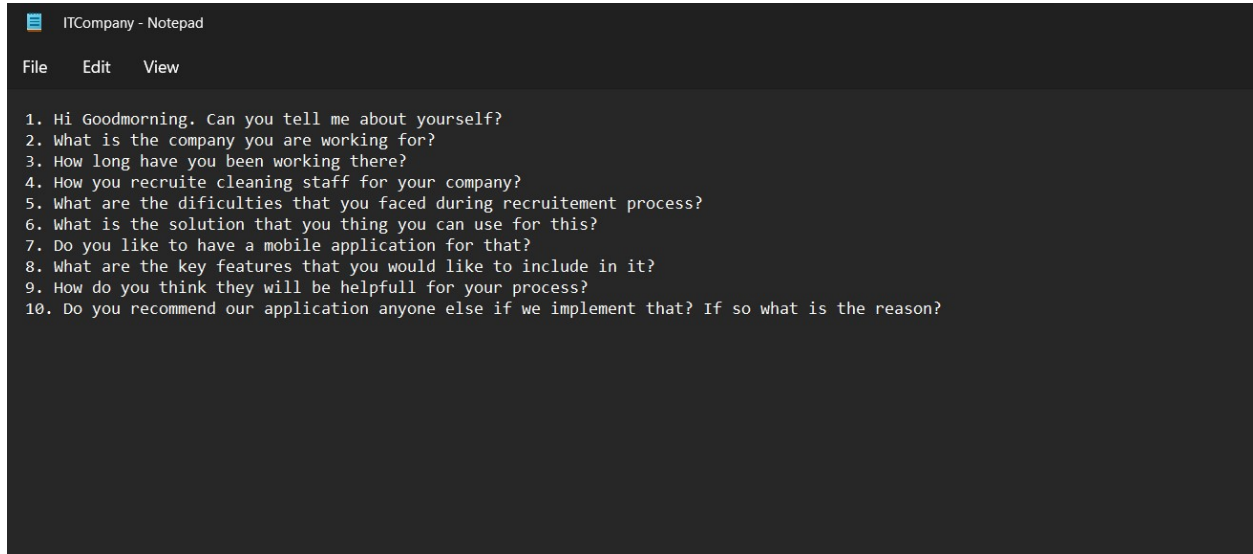
-Project details
-Number of participants
-venue, date and time
-benefits of the projects

-- 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 contacting 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
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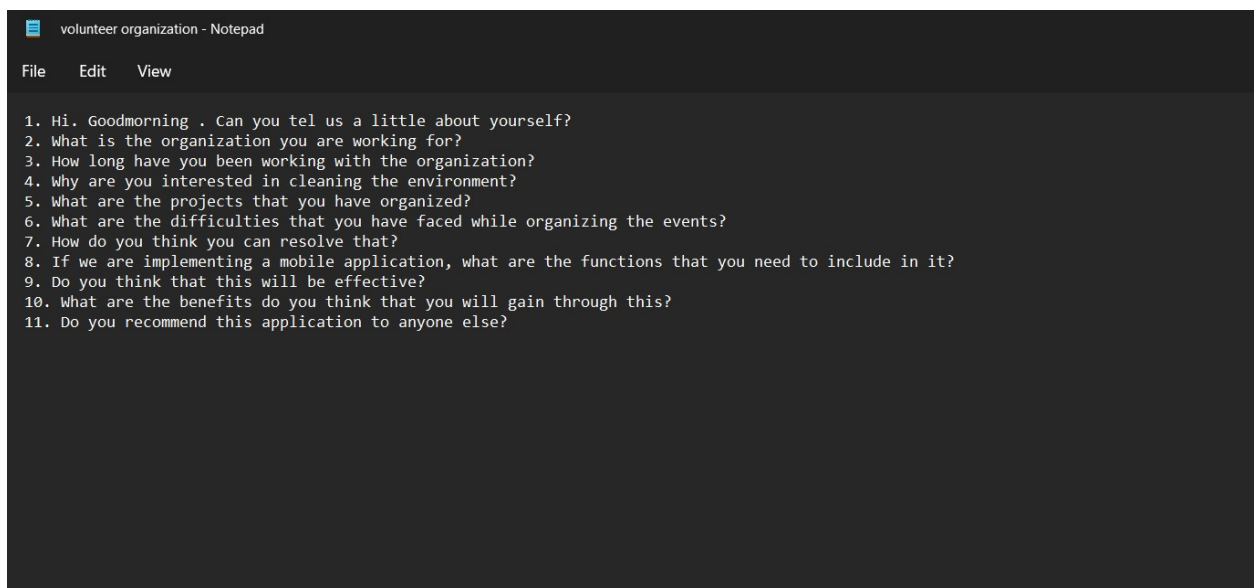
Interview 2 script (Shehan)



```
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 recrutement 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?
```

Interview 3 script (Hirusha)

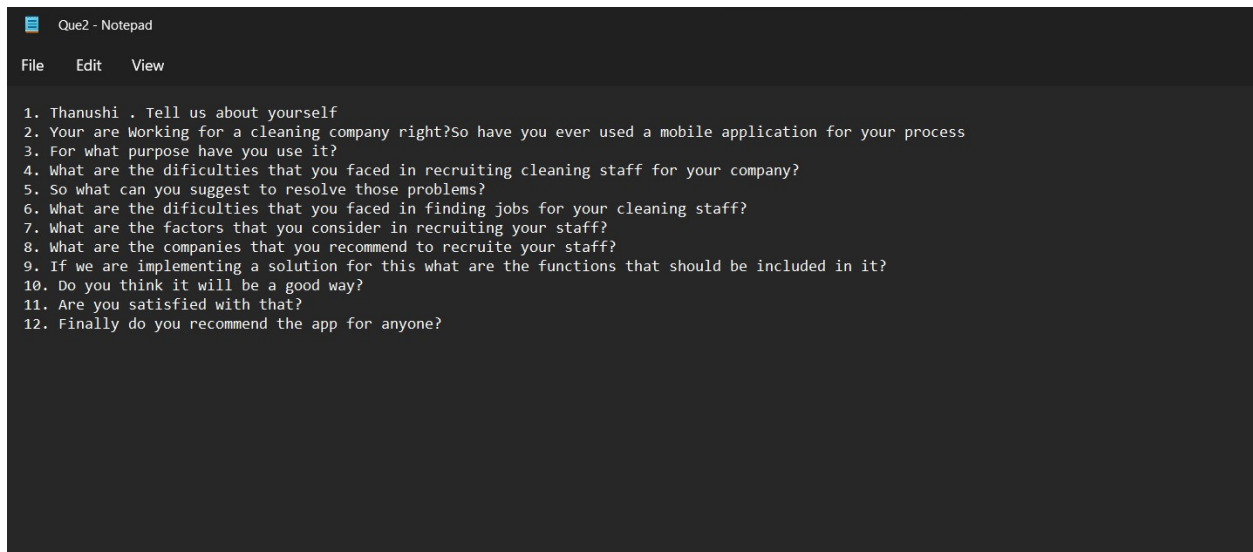


```
volunteer organization - Notepad
File Edit View

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?
```

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



```
Que2 - Notepad
File Edit View

1. Thanushi . Tell us about yourself
2. Your are Working for a cleaning company right?So have you ever used a mobile application for your process
3. For what purpose have you use it?
4. What are the dificulties that you faced in recruiting cleaning staff for your company?
5. So what can you suggest to resolve those problems?
6. What are the dificulties that you faced in finding jobs for your cleaning staff?
7. What are the factors that you consider in recruiting your staff?
8. What are the companies that you recommend to recruite your staff?
9. If we are implementing a solution for this what are the functions that should be included in it?
10. Do you think it will be a good way?
11. Are you satisfied with that?
12. Finally do you recommend the app for anyone?
```


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.

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 |
|--------|---|--|
| U_0001 | <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> |
| U_0002 | <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> |
| U_0003 | <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> |
| U_0004 | <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*