

## SE3050 – User Experience Engineering Lab Sheet 4

### Plan and conduct user research.

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## User Research

User research is the methodic study of target users including their needs and pain points. User researchers use various methods to expose problems and design opportunities and find crucial information to use in their design process. Research helps us to learn about the users and their behavior, goals, motivations, and needs. It also shows us how they currently navigate a system, where they have problems and, most importantly, how they feel when interacting with our product.

### 5 Steps of User Research

1. **Goal:** why are we doing this research, what are we hoping to get out of it.
2. **Research questions:** what are specific questions we are interested in?
3. **Method:** what specific method we want to use to learn about the questions.
4. **Participants:** what's the user profile we are looking for?
5. **Protocol:** how we want to conduct the session.

The field of user experience has a wide range of research methods available, ranging from tried-and-true methods such as lab-based usability studies to those that have been more recently developed, such as un-moderated online UX assessments.

It's not realistic to use the full set of methods on a given project, nearly all projects would benefit from multiple research methods and from combining insights. Many design teams only use one or two methods that they are familiar with. The key question is what to do when.

Identify two (02) suitable users for your selected app according to the created personas. Plan your user research and complete the given template below. Each member of the group should research the selected user (aligned with the persona) using Interviewing, video recording and using a Questionnaire.

## Usability Testing

Usability testing is just one of the many user research methods. Usability testing is the practice of testing how easy a design is to use on a group of representative users. Usability testing typically involves observation of users as they attempt to complete the tasks with a prototype to identify areas where they encounter usability issues. It usually involves observing users as they attempt to complete tasks and can be done for different types of designs, from user interfaces to physical products.

*Compile a complete report on your "User Research Plan". Use the template below.*

## Contents

SE3050 – User Experience Engineering Lab Sheet 4 .....	1
Usability Testing.....	1
User Research Plan .....	3
Introduction .....	4
Test Objectives .....	5
Methodology.....	6
Interviewing .....	6
video recording .....	8
Questionnaire .....	9
Participant Profiles.....	14
User Research – Tasks/Scenarios.....	15
Plan for Data analysis.....	18

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## User Research Plan

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## Introduction

This project is based on e-channeling mobile app in Sri Lanka. This app is an easy way to channel doctors in Sri Lanka.

e-channeling Mobile application enables you to channel doctors/consultants from 140+ private hospitals, clinics, channeling centers and private ayurvedic hospitals in Sri Lanka. It is your easy, convenient, cost effective and time saving way for channeling doctors/consultants.

With e-Channeling mobile application, you can

1) Channel your doctor

Simply search by doctors last name and/or specialty of a doctor and/or hospital name.

2) View your channel history and book the same doctor from your channel history

Channel history enables you to see your past channeling records. It also enables you to book from your history to avoid search process

3) Claim for refund if you have applied for no show refund.

No show refund is a value-added service provided for the users for a fee.

## Test Objectives

- To determine design inconsistencies and usability problem areas within the user interface and content areas.
  - Presentation errors – failure to locate and properly act upon desired information in screens, selection errors due to labeling ambiguities
  - Improper toolbar or entry field usage.
  - Failure to locate functions, excessive keystrokes to complete a function, failure to follow recommended screen flow
- Exercise the application or web site under controlled test conditions with representative users .Data will be used to access whether usability goals regarding an effective ,efficient user interface have been achieved.
- Establish baseline user performance and user -satisfaction levels of user interface for future usability evaluations.

## Methodology

There will be 6 participants including two users. and both users will be interviewed via Microsoft teams. Facial expressions will be evaluated. Each task should be completed or tried by the participants and at the end of each task information, satisfactions and suggestions will be taken.

### Interviewing

#### Script

#### Introduction

Hi ,how are you doing today?

Thank you for taking the time to us today!

We will start with some questions, and then I will give you some tasks to complete on the lap. We will use the feedback we get from you and other participants to improve this e – channeling application, so please share your honest thoughts as we go along. There are no right or wrong answers.

Do you have any questions for me before we get started?

Before we begin could I just confirm that you are still okay with this session being recorded and shared with our module in charge? [wait for reply]

Ok. Now I will start the recording now .[PRESS RECORD]

#### Warm up questions

1. What is your current role?
2. How old are you?
3. You been using e channeling services?
4. Do you have ever downloaded this mobile application?
5. How much useful this application to you in your day to day life?
6. Do you think this application is user friendly?
7. How often do you use e channeling mobile application?
8. What are the common problems do you see when using this application?
9. Do you think that the online payment process in this application secure and easy?
10. What are the features you suggest being developed and do you think they will help easing your work?

## Tasks

[This part should be quickly read out loud]

Now I am going to ask you to carry out some tasks on the Mobile phone. There are a few things to keep in mind here.

1. We are not testing you – We are testing this site. If you encounter difficulties, it is never your fault and it is always the application fault .Finding problems is good because it will show us where we need to make improvements.
2. Be as candid as possible. If you do not like something, or think it is just plain stupid, please say so.
3. Behave as naturally as possible. (I know this can be tricky with me watching what you are doing still). If you get bored of something and you do not think you'd continue any further, please let me know.
4. Please ask me any questions you wish, but for the purposes of this test I might not be able to answer them for you.
5. Most importantly, please think aloud as you do this. Share with me where you are going to click, why you are clicking there and what you are expect to see after that. It helps us to understand what are you going to do?

### **Task 1: PCR test functionality**

Relevant research objective: check whether PCR test function and payment working perfectly.

Scenario: Let's say due to this pandemic situation you want to do PCR test. As well you need to pay money for the PCR test

Task: check whether can you book a hospital without any issue to do your PCR test and payment process in this application secure and easy

1. Do you think this functionality have a good experience?
2. Do you satisfied with the current way of showing available hospitals?

### **Task 2: Driving License Medical functionality**

Relevant research objective: Check whether Driving license medical function and payment working perfectly.

Scenario: In this pandemic situation if you need to get driving license medical you can use this app and get license easily and safety. And also you can pay remotely with secure.

Task: Check whether can you select a hospital and time with yours prefer. And also check whether secure of payments and performance of this function.

1. Do you satisfy with the current details of booking?
2. Do you think your payment is secure?

### **Task 3: Channeling functionality**

Relevant research objective: Check whether Channeling function and payment working perfectly.

Scenario: In this pandemic situation and if you are busy, you can channel doctor and select time. It's save your time and you can safely arrange your channeling

Task: Check whether can you select a hospital and time with yours prefer and check doctor details

1. Do you believe that channeling details?
2. Do you satisfied with the current way to channeling doctor?

### **Task 4: Claim refund functionality**

Relevant research objective: Check whether claim refund function working perfectly and satisfied to the user.

Scenario: Hospital sector is busy very much due to this pandemic situation. When user/patient channel the doctor by paying, sometime would not be responded. Therefor this claim refund function might be helped to the user.

Task: Check whether can you refund your fee in time. And also check whether availability high or not this function.

1. Do you really want this feature for this application?
2. Do you think your fee was refunded in secure way?

### **Wrap up questions**

- 1.What do you think about this process you just went through?
- 2.Anything else you would like to add?

### **Closing words**

These are all my questions for today.

Thank you very much for taking the time to speak with me .We will be sharing your thoughts with the team.

video recording

[https://drive.google.com/drive/folders/1eMiGBGA9SHxTUe1VZ67WToSUZfSQA\\_8K?usp=sharing](https://drive.google.com/drive/folders/1eMiGBGA9SHxTUe1VZ67WToSUZfSQA_8K?usp=sharing)



## Questionnaire

### Questionnaire

For e- channeling application

Have you ever used another e channeling app to make transactions ?

☐ yes

☐ No

Is it easy to connect your doctor through this app ?

☐ yes

☐ No

Is it easy to login to this application using your username and password

☐ yes

☐ no

Are there any issues when registering to system ?

☐ yes

☐ no

can you search your appoinments easy

☐ yes

☐ no

What are the difficulties you face when you make refund?

Choose

Is it easy to upload your prescriptions and lab test?

☐ yes

☐ no

Is it easy to register for the PCR test ?

- ☐ yes
- ☐ no

What are the difficulties you face when you are registering to PCR test?

Choose

Is it easy to register to get covid vaccine?

- ☐ yes
- ☐ no

What are the difficulties you face when you register to get covid vaccine?

- ☐ take some time to load
- ☐ take some time to proceed the registration

Is it easy to connect your doctor through this app?

- ☐ yes
- ☐ no

Is this app safe to make payments ?

- ☐ yes
- ☐ no

Which feature do you use most in this app?

Choose ▼

What was your first impression in your app

Choose ▼

Why do you use this e channeling app?

Choose ▼

Is this app useful for you?

☐ yes

☐ no

Why do you choose this app?

Choose

Do you have any favorite e channeling app

☐ yes

☐ no

Please add any comments you have for improving the app.We welcome suggestions on specific areas for improvements,features you would like to see added to the app

Your answer

## Participant Profiles

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

Name	Demography	Location, Date and Time
Sayani nimesha Kularathna	23 years old Bank Manager Lives in Kuliypitiya	Microsoft teams 2021/08/20 8.00 pm
Nishari Kularathna	27 years old Designer Lives in Kuliypitiya	Microsoft teams 2021/08/20 8.30 pm

## User Research – Tasks/Scenarios

No.	Task Instruction	Target	Probes
1	<p>To Register for the PCR test</p> <ol style="list-style-type: none"> <li>1. First click on PCR test button</li> <li>2. Then it will view hospitals to do PCR test.</li> <li>3. Then click on Book now button to book hospital (according to your wish)</li> <li>4. Then it will view available times and dates in that particular hospital</li> <li>5. After that click on proceed button It will navigate to form to fill patient data.</li> <li>6. Fill the form and register for the PCR test.</li> </ol>	<ul style="list-style-type: none"> <li>Easily navigate to particular pages</li> </ul>	<ul style="list-style-type: none"> <li>It will take some time to load pages.</li> </ul>
2	<p>To book a doctor for a driver's license medical certificate.</p> <ol style="list-style-type: none"> <li>1. Firstly click on 'Driving license medical' button.</li> <li>2. Then it will navigate to View all hospital details page.</li> <li>3. Therefore you can select a hospital with your wish and then click on 'Book Now' button.</li> <li>4. Then navigate to page view date and time with available or full status.</li> <li>5. You can only select available date and time with your wish and click on 'available' button.</li> <li>6. It will navigate to page with form to fill user details and click on 'Proceed' button.</li> <li>7. After that it will be navigate to page view all reservation details and click on 'Proceed' button.</li> </ol>	<ul style="list-style-type: none"> <li>Easily book a doctor for driver's license medical certificate</li> </ul>	<ul style="list-style-type: none"> <li>It will take some time to load pages.</li> <li>Some pages are not user friendly.</li> </ul>

	8. And navigate to payment page after successful payment you book a doctor for driver's license medical certificate.		
3	<p>To Arrange Channeling</p> <ol style="list-style-type: none"> <li>1. First click on Menu Item</li> <li>2. Then it will view All the menu items</li> <li>3. Then click on Channeling</li> <li>4. Then it will view available times ,doctor names ,specialization hospital and dates in that particular hospital type</li> <li>5. After that click on Search button It will Search data available or not</li> <li>6. Then it gives channeling information</li> </ol>	<ul style="list-style-type: none"> <li>• Easy to check channeling available and make channel</li> </ul>	<ul style="list-style-type: none"> <li>• It will take some time to load pages.</li> <li>• There are many pages to same content</li> <li>• Search button most of the time not works</li> </ul>



4	<p>Claim refund</p> <ol style="list-style-type: none"> <li>1. Login to the application.</li> <li>2. Go to the main menu.</li> <li>3. Select claim refund option.</li> <li>4. Enter appointment and bank account details.</li> <li>5. Click send button.</li> </ol>	<ul style="list-style-type: none"> <li>• Navigate within the pages was not responsiveness.</li> <li>• Payment refunding was delayed.</li> </ul>	
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## Plan for Data analysis

S - Hello good evening Ms nishari. Thank you for joining with us.  
U -hello good evening  
S - As a bank manager, we want to know the feedback based on your user experience on this app. First, I will ask simple questions from you.  
U - ok....mmmmmm  
S - Are you familiar with echanneling app?  
U- Yes of course, I am familiar with the app  
S - Okay, how often do you use this app?  
U - Um. Most of the time I use the app when I needed channel a doctor.

s -How much useful this application to you in your day to day life?  
u - It useful me to contact with doctors without going to hospital due to this covid -19 situation. But there was some problems .but it is ok.  
s - Now I am going to ask you to carry out some tasks on our screen .we will share our screen. There are a few things to keep in mind here.  
Do you have an account nihari?  
u - Yes of course.  
s - Can you login to the website if you are not logged in?  
U - Okay I am already log in to the app.  
S - ah ok. Can you view the home page ?  
U - Hold on. This UI is not well organized.  
S - yes, it is.

S - ok nishari. Now i will give some task to you .  
U - ok.  
S - Can you go to PCR test tab?

U - hold on .These tabs are not well organized.  
S - yeah it is. Can you See the hospitals in that page?  
U - Oh wait .yes I can see .  
S - Ok Now you can book a hospital for by clicking book now button.  
U - Ok wait .It gets some time to load. Now i can see the available hospital list .but the UI is not user friendly.  
S - Now you can see the time and date that are available for PCR test.  
U - yes I can see that. But I can't Identify what to do next ?  
S - yes .that UI is not friendly to user .Ok I will tell you what you need to do next?  
U - Yeah. Ok .  
S - Click on available button. Then it will popup a window to proceed. Click on proceed button.  
U - Ok .I will do it as you say. It take some time to load. Now I can see a from to register .There are so many details to fill.  
S - Yes of course .It is too difficult to user. Now fill the details .Finally you need to click on proceed button.  
U - Ok .I will do it.Ohh it is not working what the hell!  
S - Yes nishari that is a problem of this app. ok nishari. that is all in this task .Thank you nishari. Now I will hand over to dew.

S - thanks you nava .i'm dewangi.  
now we will go to next task .can u go to channeling tab and select hospital type?  
U - ok wait i select private hospital  
S - ok now you can fill channeling details and search that details in

available

U - ok hold on .I think it gets some time to load. Still it is loading

i think that has problems in loading

S - is it still loading?

U - yes

s- can you fill the form ?

u - ok

s - then click search button

u - ok i think it has same problems - Ok fine we will look about what is going on .What do you think about this

process you just went through?

U - ohh .It is get so much time to do these tasks.

S - Do you satisfied with the current way of showing available hospitals?

U - No it is not user friendly and not well organized.

also we can't identify what to do next .Yes sayani thanks you for joining us.

that is all about in this task .

Now I will hand over to minoli.

[7:28 PM] Rathnayake R. M. D. M. it19129518

S - Thank you dewangi.

Ok sayani We will move to next task .

U - ok.

S - Can you go to Driving license medical tab?

U - Year sure ,but these tabs are not well organized

S - Year it is , I will fix it .Now you can see list of available hospitals in that page?

U - please wait, that page is still loading. Now I can see the hospital list, but I can't search a hospital with my needs.

S - OK, after you click on book Now button and U will navigate to page with details about available dates and times for your driver's license medical certificated u click this button?

U - year I clicked, In that page I have not any idea about it process. and also it is not user friendly

S - Yes, I know its not much user friendly, Here can you see two buttons, there are available and full.

U - Really! is this buttons? I thought these are normal status tag.

S - No there are buttons, u can click on only available button and u will get form to fill your details.

U - this buttons are not Clickable.

S - Ok find I will look about what is going. And

We will give attention for your comments. Thank you Now I will hand over to Shalita

.

S - Is this boring nishari.

U- no it is ok.

S - Now you have only one task to complete. we will start now.

U - ok..

S - Can you go to the registration page...

U - Yes I am already in the registration page.

S - Good..

For registering with application, it ask enter personal information, do you satisfy with getting no of details?

U - Actually I'm not satisfy with that, Because it asked to enter lots of unnecessary information.

S - so what you suggest for that...?

U - I think it should include some fields such as patient's age, city which can help to identify exact user.

S - ok good, Now you can move to the appointment history page by passing main menu...

Did you do it....

<Wait few moment>

U - Yes I did it..

S - Now you should search particular appointment witch was reserved previously by selecting one given options.

<Wait few moment>

U - Yes did it

S - What do you think that process...

U - It hard to find appointment details. For that I always should enter details and search it. and also I cannot get latest appointment details easily.

S - ok fine...

Now you again go to the main menu...

and select the claim refund option...

U - Yeah.. wait a second, I will get it

S - In this function you can claim the refund for previous appointment..

Do you can try with it...

<Wait few moment>

U - Sorry, Actually I unable to preformed this task Since I can't use my personal bank details.

S - Ok No problem. fine

Finally can you tell me what about the responsiveness of this application...?

U - Ok wait. I felt, It gets some times to load and also the UIs is not very user friendly.

S - We will give attention for your comments. Thank you

U - your welcome

S - Do you have any suggestions to improve the quality of the this mobile app?

U - yes I think your interface and navigation are not working properly i suggest these all want to fix

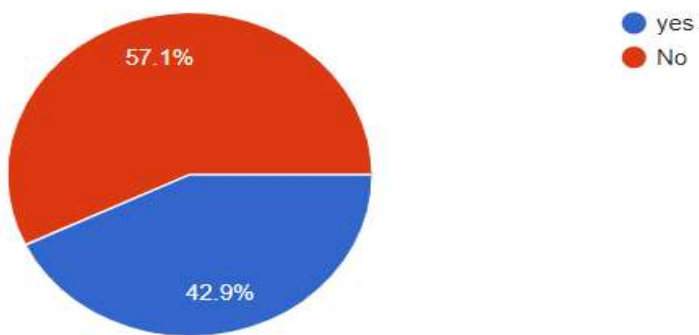
S - ok that's all nishari.so thank you very much for joining with us. have a nice day

u - ok have a nice day

[https://drive.google.com/drive/folders/1eMiGBGA9SHxTUE1VZ67WToSUZfSQA\\_8K?usp=sharing](https://drive.google.com/drive/folders/1eMiGBGA9SHxTUE1VZ67WToSUZfSQA_8K?usp=sharing)

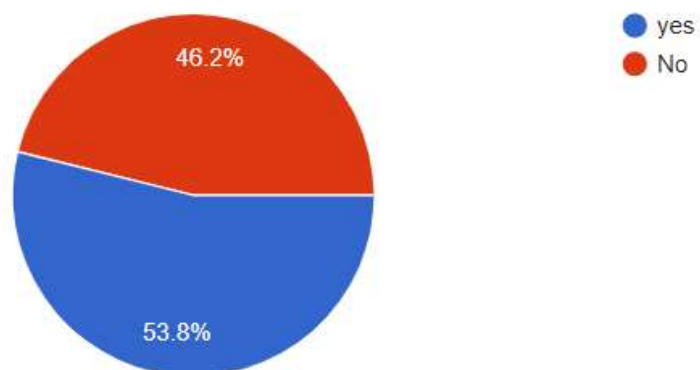
Have you ever used another e channeling app to make transactions ?

14 responses



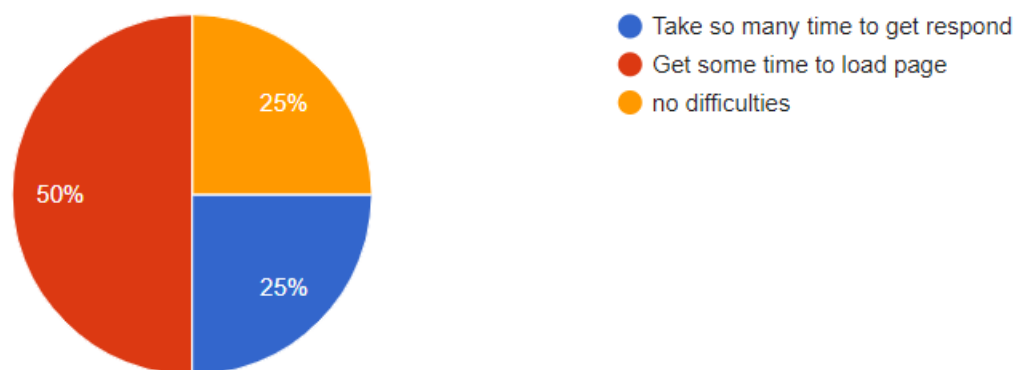
Is it easy to connect your doctor through this app ?

13 responses

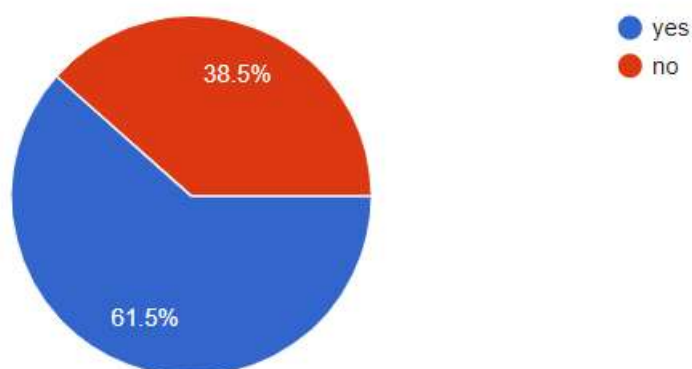


What are the difficulties you face when you make refund?

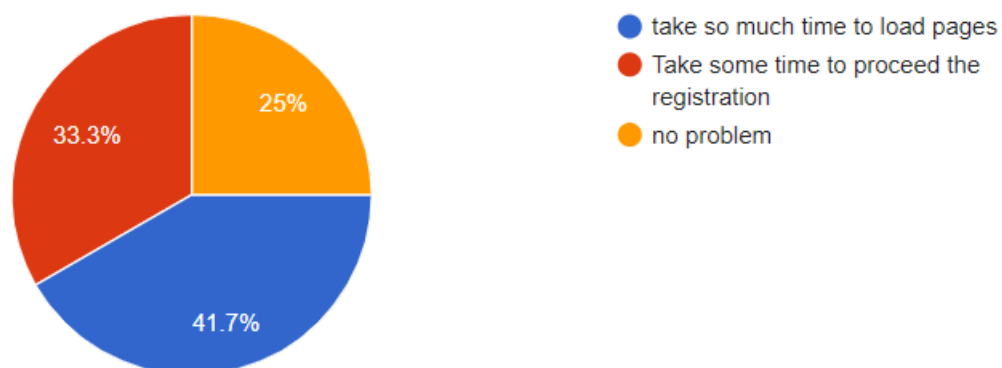
12 responses



Is it easy to register for the PCR test ?  
13 responses

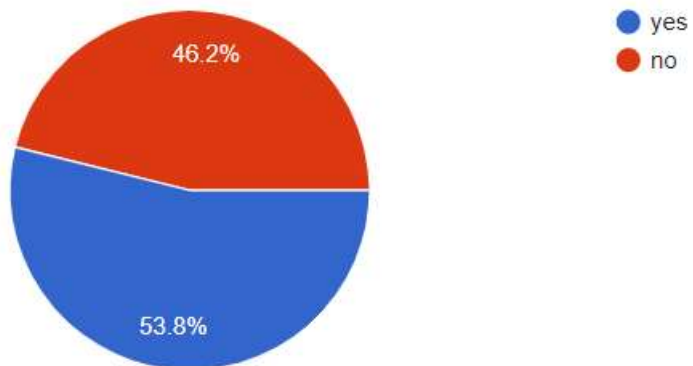


What are the difficulties you face when you are registering to PCR test?  
12 responses



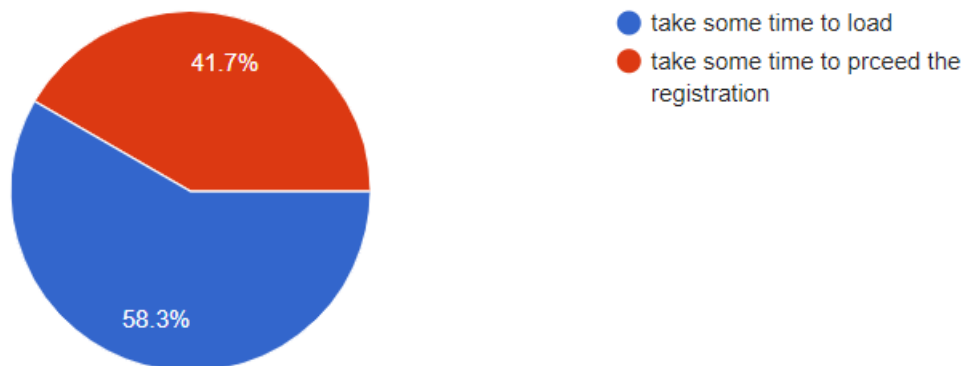
Is it easy to register to get covid vaccine?

13 responses



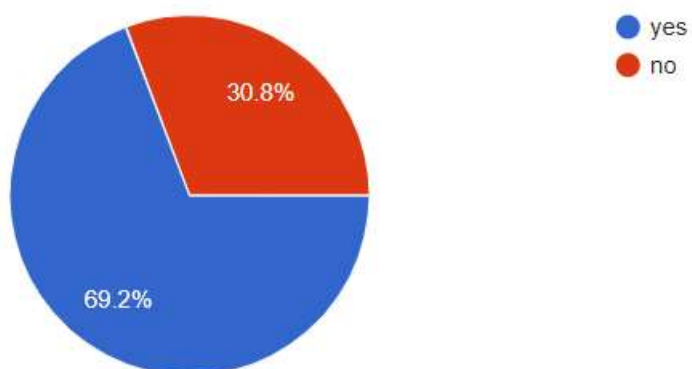
What are the difficulties you face when you register to get covid vaccine?

12 responses

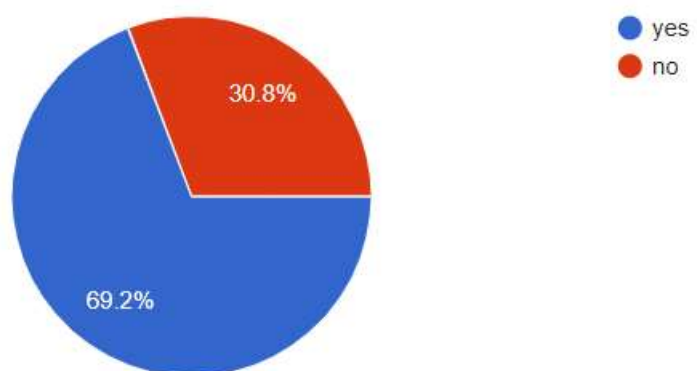




Is it easy to connect your doctor through this app?  
13 responses

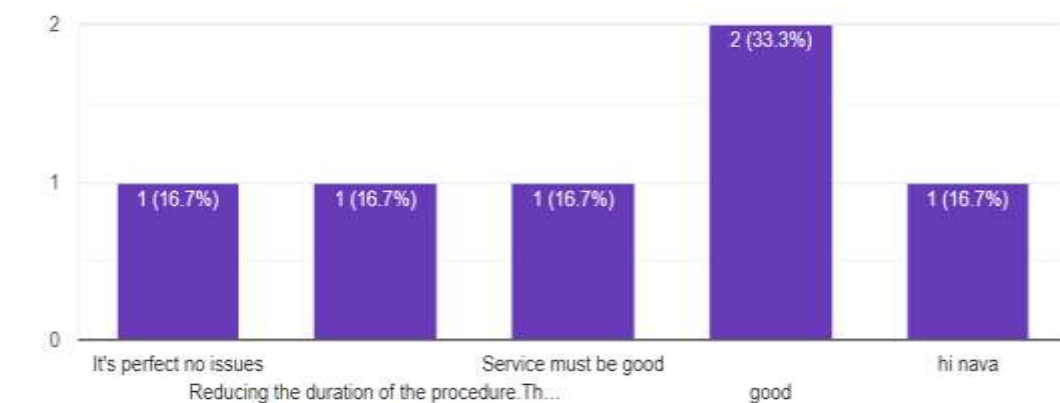


Is this app safe to make payments ?  
13 responses

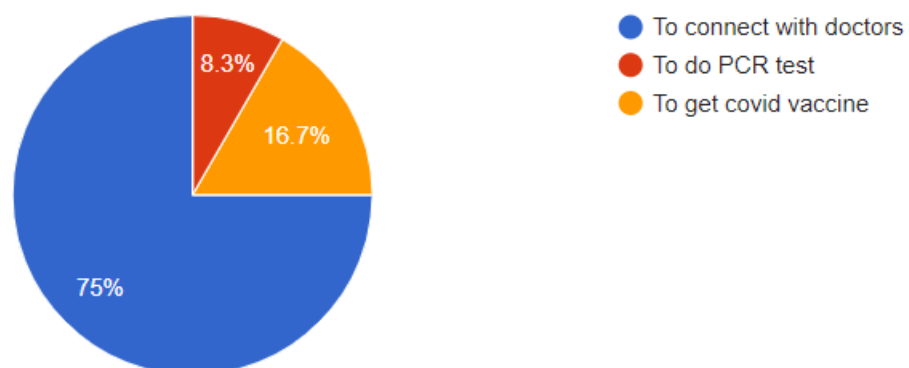


Please add any comments you have for improving the app. We welcome suggestions on specific areas for improvements, features you would like to see added to the app?

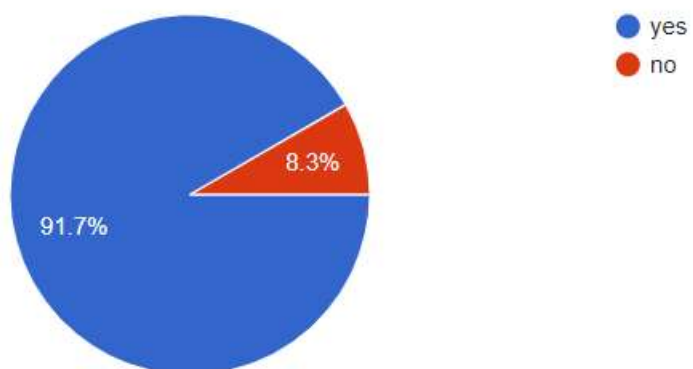
6 responses



Why do you choose this app? 12 responses



Is this app useful for you?  
12 responses



Why do you choose this app? 12 responses

