

Lab sheet 04

**IT3050 – User Experience Engineering** 

Semester 2, 2021

# User Research Plan

Group No.

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## Introduction

**NOLIMIT** is the official mobile application for the Sri Lankan fashion chain of the same name. It is an online shopping platform. Users can browse the products by category or brands, and purchase them. They can also view offers from the app. The existing application was created in 2016, and has some outdated designs. We intend to identify those design and user experience issues and come up with solutions to fix them and redesign the application to suit the current industry standards.

Usability testing is done on all the major functions of the application. They include registering and logging in to the system, purchasing products, browsing products by brand and viewing offers. We are testing the users' experience while doing these tasks and their satisfaction and overall impressions on the UI and UX of the application. The user-friendliness of the app is tested by considering how easy it is for the users to use the interface to do certain tasks and navigate through the application.

By conducting this usability testing, we hope to discover design issues and usability issues present in the existing application and get the users' feedback and suggestions on how we could fix these issues and improve the overall user experience of the application. The results of the testing will be used to decide how we can redesign the application to suit the users' preferences while providing the best user experience possible to them.

## **Test Objectives**

- To gather data needed to identify usability issues in the Nolimit mobile application and to improve them.
- To understand how a real user interacts with the mobile application and to make changes based on the results.
- To assess how easy or how difficult perform the tasks using the Nolimit mobile application
- To discover the problems available in the Nolimit mobile application.
- To see if users are capable of doing tasks successfully and independently.
- Evaluate users performance and mental state as they attempt to accomplish activities to evaluate if the design is effective.
- To find solutions and suggestions to improve the user experience



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## Methodology

#### **Participants**

Two people were selected to participate in the usability testing.

Participant	Demography	Gender
1	University student	Female
2	Adult employee	Male

#### Method

The usability testing was conducted as an interview with the users.

#### Location

The usability testing was conducted remotely, in an online environment, through video communication platforms.

#### **Process**

An interview script was prepared prior to the interviews. The participants were asked to install the application on their smartphones. All four members of the team participated in each interview, but only two directly interacted with the user to conduct the usability test, while the other two were taking notes. The interviewing and note taking roles were switched among the team members for each interview. Each interview was conducted and recorded through an online video communication platform (MS Teams).

During the interview, before proceeding to the usability testing, the participants were asked some basic personal questions to get an idea about their demographic.

The usability testing was carried out with 4 tasks given to each participant. These tasks were compiled with the intention to cover all functions and UIs selected by all 04 members of the team. The participants were asked and given some time to do each task scenario. After each task, they were asked about their experience of doing the said task, and their feedback was recorded and noted down.

After the specific task scenarios were tested, the participants were asked some general questions regarding the application. Those questions were asked with the intention of getting the overall impression the users had of the application.

#### **Equipment & Tools**

Microsoft Word: Used to prepare the interview script.



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- Microsoft Teams: Used to conduct and record the interview.
- Microsoft Excel: Used to prepare graphs and analyze the data

## Interviewing

We conducted the interview through MS Teams. We prepared a script to walk through the users through the usability testing. The script is mainly divided into 4 parts: Introductions, Warm up questions, Tasks and Wrapping up Questions. The warm up questions are prepared to get to know about the users. The tasks are the tasks the user should perform while doing the testing and the wrap up questions are the questions in the questionnaire.

#### Script -

#### Introduction

Hi [Name], how are you doing today?

Thank you for taking the time to talk to us today!

My name is [Name]. We are also joined by other members of my team. I and [name] will be walking you through today's session, and [Name] and [Name] will be taking notes during our call.

As I mentioned, we are a group of 3<sup>rd</sup> year students at SLIIT and we've been asked to improve the user experience of an existing mobile application. So we have chosen the Nolimit mobile application for this purpose. So today we are testing this app to make sure we identify any usability issues early in the process.

During this session, we'll start by asking a few warm up questions and later on we'll ask you to accomplish a few tasks using the Nolimit mobile application. We will use the feedback we get from you and other participants to improve this Application, so please share your honest thoughts as we go along. There are no right or wrong answers!

As you go about using the application, I'll ask you to think aloud as much as possible: to describe what you're looking at and what you're trying to do. This will be a big help.

Do you have any concerns or questions before we begin?

Great. If you need a break or to stop at any time, please let us know.

With your permission we would like to record this session, could you please confirm that you are okay with this session being recorded and shared with our module in charge? [Wait for reply]

Awesome! I will start the recording now. [PRESS RECORD]



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Before we take a look at the application, I'd like to hear a little bit about you

#### Warm up questions

- 1. Please confirm your name is [Name] right?
- 2. How old are you?
- Do you work?[If Yes]
- What's your profession?[If No]
- 5. Do you study?
- 6. Where do you study?
- 7. Do you do online shopping?
- 8. How often do you shop online?
- 9. When was the last time you purchased an item online?
- 10. How confident are you with browsing, shopping, or other online shopping-related tasks?
- 11. What is the biggest challenge you face with shopping online?
- 12. Which device(s) do you usually use for online shopping?
- 13. Have you ever used this app before? [If yes]
- 14. How much useful this application to you in your day to day life?

OK, great. We're done with the questions, and we can start looking at things. To start, please look at the application and tell me what you make of it: What are your first impressions? What is this mobile application for? You can scroll if you want to, but don't click on anything just yet.

Thanks. Now I'm going to ask you to respond to the following few scenarios. I'm going to read each scenario out loud.

#### Tasks/Scenarios

#### Task 1 – Registering and logging in to the account

Let's say you have downloaded the application and you want to register for this application. Can you please try to register and log in to this app?

- 1. How did you find this task? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 2. Was it easier for you to navigate to the registration screen?
- 3. Are you satisfied with the registration process experience?



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#### Task 2 - Purchasing a product

Let's say you wanted to buy a tshirt. Can you please find the [tshirt name] tshirt and purchase it. Don't worry you don't want to make the payment.

- 1. How did you find this task? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 2. Was it easier for you to search the product? and if not, what were you expecting?
- 3. Do you need more information to decide to purchase this product or not?
- 4. How would you improve the process of finding the product?
- 5. How did you find the experience of using this app to purchase this product?

#### Task 3 - Viewing products in a brand

Let's say you wanted to search for products of Wolfgang Brand. Can you find the Wolfgang Brand and can you find the products in that brand?

- 1. How did you find this task? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 2. Was it easier for you to find the brand?
- 3. Were the products displayed?
- 4. Are you satisfied with the experience you had during this task?

#### Task 4 - Viewing offers

Let's say you love discounts and you want to view the available offers in the system. Can you go to the offers and let us know the available offers?

- 1. How did you find this task? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 2. Was it easier for you to find the offers?
- 3. Are you satisfied with the experience you had during this task?

Thank you so much that's the end of the tasks. Before wrapping up I would like you to answer some general questions regarding the app.

#### Wrap up Questions

- 1. Do you think this application is user friendly?
- 2. Did you enjoy the online shopping experience?
- 3. How satisfied are you with the app?



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- 1- Satisfied
- 2- Somewhat satisfied
- 3- Neither satisfied nor dissatisfied
- 4- Somewhat dissatisfied
- 5- Dissatisfied
- 4. Do you like the interface? Is it easy to use?
- 5. What are the two things about the design that you really liked?
- 6. What are the two things about the design that you didn't like?
- 7. What are the common problems do you see when using this application?
- 8. What do you think about the way feature and information were presented?
- 9. After this session will you continue using this app? Or will you be uninstalling this app? If so why?
- 10. What are the features you suggest being developed and do you think they will help improve your user experience?
- 11. Your overall experience with this mobile application and are you satisfied with the available features of this application?
- 12. How likely are you to recommend this mobile application to other online shoppers.?
- 13. What is your overall rating for the app? (Rate between 1-10)

Great we're done with the questions. Thank you so much for your time and your valuable and genuine feedback. This will help us to improve this application.

Once again thank you so much.



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## Video recording

We performed the interview through MS Teams. So we asked for the consent of the user and we recorded the entire usability testing. During the testing, we asked the user to perform certain tasks and we requested the user to think aloud while performing these tasks so that the steps they go through will also be recorded in the video.

Links -

- 1. https://drive.google.com/file/d/1wAR3hfSlX7Ci5G b1Dx89guDcf2w7ew0/view?usp=sharing
- 2. https://drive.google.com/file/d/1X4XvPgG5pl1MTPTsuTWqRH71pEmlWbx /view?usp=sharing

## Questionnaire

We prepared a questionnaire to get the users experience on the performed tasks. We asked questions at the end of each task and at the end of all the tasks we prepared a set of wrap-up questions to identify user's feelings about the app. This questionnaire consisted of both open ended and close ended questions in order to collect both qualitative and quantitative data. We asked these questions verbally and we also had some questions to provide ratings. We asked the user to rate each task and rate the entire app. The questions are -

- 1. How did you find the registration task? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 2. Was it easier for you to navigate to the registration screen?
- 3. Are you satisfied with the registration process experience?
- 4. How did you find the purchasing of a product task? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 5. Was it easier for you to search for the product? and if not, what were you expecting?
- 6. Do you need more information to decide to purchase this product or not?
- 7. How would you improve the process of finding the product?
- 8. How did you find the experience of using this app to purchase this product?
- 9. How did you find the task of viewing brands? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 10. Was it easier for you to find the brand?
- 11. Were the products displayed?
- 12. Are you satisfied with the experience you had during this task?



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- 13. How did you find the task of viewing offers? Can you rate it between 1 -5 where 1 is very difficult and 5 is very easy?
- 14. Was it easier for you to find the offers?
- 15. Are you satisfied with the experience you had during this task?
- 16. Do you think this application is user friendly?
- 17. Did you enjoy the online shopping experience?
- 18. How satisfied are you with the app?
  - 1- Satisfied
  - 2- Somewhat satisfied
  - 3- Neither satisfied nor dissatisfied
  - 4- Somewhat dissatisfied
  - 5- Dissatisfied
- 19. Do you like the interface? Is it easy to use?
- 20. What are the two things about the design that you really liked?
- 21. What are the two things about the design that you didn't like?
- 22. What are the common problems do you see when using this application?
- 23. What do you think about the way features and information were presented?
- 24. After this session will you continue using this app? Or will you be uninstalling this app? If so why?
- 25. What are the features you suggest being developed and do you think they will help improve your user experience?
- 26. Your overall experience with this mobile application and are you satisfied with the available features of this application?
- 27. How likely are you to recommend this mobile application to other online shoppers.?
- 28. What is your overall rating for the app?



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# **Participants Profile**

Name	Demography	Location, Date and Time
Eshadi Nethmini	Age – 23	Date - 19/08/2021
Warnakulasuriya	Gender – Female	Time – 09:00 PM
	Profession – Student	Location – MS Teams
	University – University of	
	Peradeniya	
	Lives in – Kurunegala	
Akila Anuradha Ekanayake	Age – 29	Date - 20/08/2021
	Gender – Male	Time – 09:00 PM
	Profession – Engineer	Location – MS Teams
	Lives in – Colombo	



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## Task/Scenarios

No	Task/Instruction	Target	Probe
1	Let's say you have downloaded the application and you want to register for this application. Can you please try to register and log in to this app?	Check whether the login and registration function works smoothly	
2	Let's say you wanted to buy a T-shirt. Can you please find the [tshirt name] T-shirt and purchase it. Don't worry you don't want to make the payment.	Check whether the user is able to search, view and buy products	
3	Let's say you wanted to search for products of Wolfgang Brand. Can you find the Wolfgang Brand and can you find the products in that brand?	Check whether the user is able to view brands and search products of a specific brand	
4	Let's say you love discounts and you want to view the available offers in the system. Can you go to the offers and let us know the available offers?	Check whether the user is able to view offers and purchase products with offers.	



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## **Plan for Data Analysis**

### 1. Interviewing

To analyze the data collected from the Interview we initially plan to transcribe the interview. Next, we plan to read the transcript and make notes of our first impressions. The data collected here is qualitative data. Next, we plan to annotate the transcript, which is highlighting and labelling important words. Next, we plan to conceptualize the data and segment the data based on their characteristics. Finally, we plan to analyze the segments and build insights on the interview.

## 2. Video Recording

To analyze the data collected from the video recording we initially plan to transcribe the video recording. The video recording contains all the recordings of the interviews, tasks and questionnaires but here we are mainly considering about the tasks because we will consider the questionnaire in the next section. The users who performed the usability testing thought aloud while performing the tasks. So, after transcribing data we are planning to identify the pain points/blockings of the user. The data collected here is qualitative data. After identifying the blockings we are planning to conceptualize data/categorize data and then we are planning to segment the data and analyze these segments by taking a deep dive into the segments and determining the reason for the issues and the solutions. At this stage, we will also have ratings, which is quantitative data, provided by the user for each task and we will be able to align these quantitative data with the qualitative data. Finally, after the analysis is done, we are planning to come to a conclusion.

### 3. Questionnaire

We created a questionnaire with open-ended questions and close-ended questions. The purpose of having the open-ended questions was to obtain qualitative data from the questionnaire and the purpose of closed ended questions was to obtain quantitative data. There were some questions to rate and these are the close ended questions where we obtained the quantitative data. We noted down the answers provided by each participant for each question and we added them to Excel and we generated graphs for each of the quantitative data collected and this will help us to visualize the data. We will analyze these data and we will be able to make conclusions on the overall experience users had while using the mobile application.



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# THE END