

## **Carnegie Mellon University Africa**

### **Android Mobile App Development**

#### **Iteration 1 - Adapt Phase Project**

##### **Team members:**

1. **Aanuoluwapo Orioke (aorioke)**
2. **Furaha Saleh Benedict(fbenedic)**
3. **Malachi Ugwu Chukwuemeka(mugwuchu)**

##### **Project : Hairdressing Salon booking appointment (SukaFasta)**

### **ADAPT PHASE**

#### **1) Document the feedback approach and methods used with each type of stakeholder**

We created two google forms to collect feedback from our stakeholders. One for the [user](#), and one for the [hairdresser](#). Users were mostly Carnegie Mellon University Africa students.

The hairdressers' feedback form includes questions that help us understand the improvement they would like to see, features they think are unnecessary, how easy it is for them to use our app, their willingness to recommend our app to others.

Similarly, the questions for the users were structured in a way that would allow us gauge and understand how satisfied they are with our current features, know the features they would like to see in our app, know how easy it is for them to use some of the components we included in the bookings screen and know how useful they think our app could be to them, their friends and their hairdressers.

Questions included open ended questions like "What features would you like to see?". This question type was used to allow them express themselves without restriction. Other questions like "How easy was it to pick date?" were multiple choice questions with a scale of answers (Very difficult, Difficult, Neutral, Easy, Very easy). This question type would help us judge their answers based on the scale we provided. These types of questions were used for both stakeholders. Lastly, a field for additional comments was added to allow them to mention other things they couldn't mention under the questions we provided.

For testing the app, we allowed both stakeholders to test the app on our android phone, which has SukaFasta installed on it. This is because not all users have android phones. After testing the app, we allowed them to fill the feedback form.

## Questions

Users had to answer 6 main questions:

1. What did you struggle with on the app?
2. What features would you like us to remove?
3. What features would you like to see but are missing in SukaFasta
4. Ease of usage subquestions: (options: very difficult, difficult, neutral, easy, very easy)
  - a. How easy is it to select time?
  - b. How easy is it to select date?
  - c. How easy is it to register?
  - d. How easy is it to login?
  - e. How easy is it to understand how to use the app?
5. Recommending SukaFasta to friends sub-questions (options: very likely, likely, neutral, unlikely, strongly unlikely)
  - a. How likely are you to recommend SukaFasta app to a friend?
  - b. How likely are you to recommend SukaFasta to your hairdresser?
6. Additional comments

Hairdressers had to answer 5 questions:

1. Ease of usage subquestions (options: very difficult, difficult, neutral, easy, very easy):
  - a. How easy is it to use/understand the app?
  - b. How easy is it to add service?
2. Recommending SukaFasta to friends sub-questions (options: very likely, likely, neutral, unlikely, strongly unlikely)
  - a. How likely are you to recommend SukaFasta app to your client?
  - b. How likely are you to recommend SukaFasta to other hairdressers?
3. What would you like us to add to the app?
4. What would you like us to remove from the app?
5. Additional comments

## 2) Document the resulting feedback in detail. Include (or link to) the complete set of feedback data

We had a total of 13 responses from users and 2 responses from hairdressers.

### User

 SukaFasta User Feedback Form (Responses)

Users found some aspects of registration difficult. One of the things that was pointed out is that a lot of information was requested from them when they tried to register on the app. Also, some people found it frustrating to not know what exactly went wrong when the toast message, “Registration failed”, popped up. A common confusion users had was the fact that the dropdown for selecting whether they are “client or hairdresser” did not display under the required field. It displayed on top of the page. Someone encountered a bug when they tried to submit the registration form without actually entering any of the requested information. The application crashed. For some android phones, the fields were not showing. So the registration and login page only showed the submit buttons.

For the booking screen, users suggested that rather than allowing them to pick the time by clicking on the hours and minutes of a clock, they would prefer to pick time in a more intuitive way. Someone suggested we use a format that lets them select time written in numbers. In addition, people made mention of the fact that they are not able to know whether their appointments have been booked or not, after they click on the “Confirm Appointment” button. Lastly, users wanted to see pictures of services, as opposed to radio buttons. A responder suggested we auto-move the cursor to the next field when a user is done entering the response to one field (registration and login). Also, for the navigation bar at the bottom, it was suggested that we place the home button in the middle, rather than at the leftmost end. Since this only came up with one responder, and for apps we use on a daily basis, it doesn’t seem people put the home button at the middle, we’ll keep the home button where it currently is.

On features they would like us to remove, only two responses had features we could remove. Someone noticed that it is possible for you to book an appointment for a date that has passed. They would like us to remove that. The suggestion that followed is for us to disable past dates. Another suggestion was that we change the app icon from being a padlock, which indicates that the app is related to security when it has nothing to do with that. Also, it was suggested that we get rid of the pick time clock. It appears that a lot of users do not like this feature. Some users noticed that “Add Service” feature is available to them. They would like us to remove this since they should not be able to add a service.

Some of the features users would love to see that are not currently available are:

- Selecting from a list of hairdressers (multiple hairdressers) and their available slots
- Seeing nearby hairdressing salons
- Customer reviews and ratings for hairdressers
- Prices of services
- Ability to select multiple services
- Ability to view active appointments
- Ability to update/reschedule appointments
- Virtual and Augmented reality for testing out hairstyles

- Chat feature that allows users chat with hairdressers

Ease of Usage: Most people found it easy to select time; only 2 of the 13 responses found it hard to select time. Everyone, except one neutral responder, found login to be easy. Hence, there's not so much to change in login.. About half of the responders said it's easy to register, while the other half either found it difficult or were indifferent. This means that we have some work to do on the registration. Our app seems to be easy to understand, as 10 out of 3 responders found it easy to understand. Only one responder found it difficult to understand.

In terms of recommendation, seems responders find our app to be useful to them, as over 80% of responders said they are likely to recommend our app to their friends. Only one person said it's highly unlikely that they recommend SukaFasta to their friends. About 75% of responders are likely to recommend SukaFasta to their hairdressers. Again, only one responder is highly unlikely to recommend SukaFasta to their hairdresser.

Furthermore, some users pointed out that it's possible they still have to wait at the salon. For instance, if the hairdresser takes longer than anticipated on a client's hair, other clients scheduled to come after the current client would be delayed.

## **Hairdresser**

### **+ SukaFasta Hairdressers Feedback Form (Responses)**

In general, the hairdresser found SukaFasta to be easy to use and understand. In terms of how useful the app is, the hairdresser seems to find it to be useful, as she said she is very likely to recommend SukaFasta to both her clients and fellow hairstylists.

For improvements to be made, she suggested that we complete the remaining screens and she sounded eager to test them once they are ready. She did not have a response to what she would like us to remove from the app.

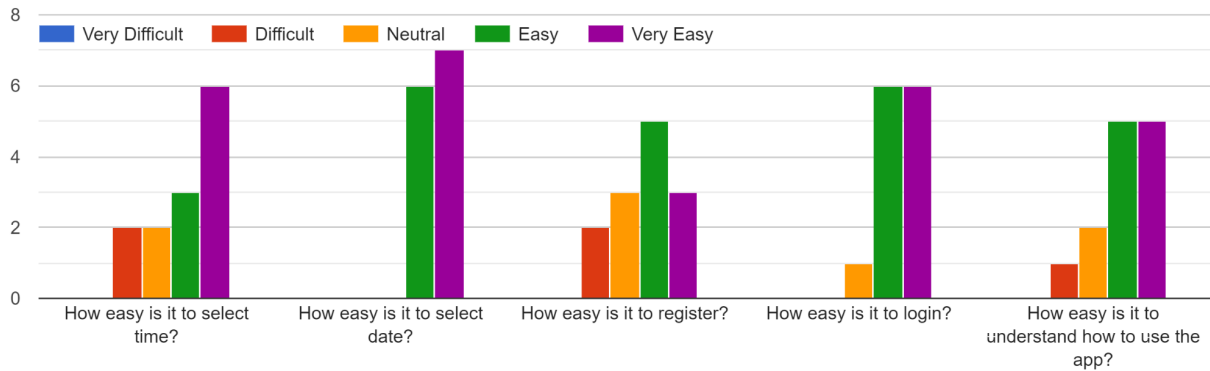
In conclusion, it seems the hairdresser is satisfied with what we currently have, and she is eager to see the other things we haven't implemented yet.

### **3) Document the feedback in whatever way you feel is most appropriate. Photos, sketches, renderings, screenshots, videos, text, etc.**

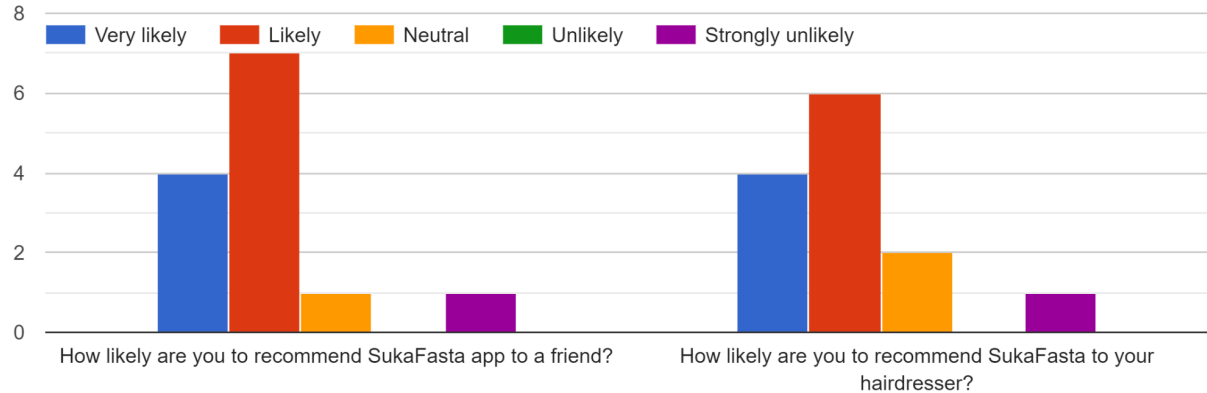
From the feedback the users and hairdresser shows that they were satisfied with the easy of usage of the app and would like to recommend the app to other people. The below showed the users testing feedback on each the features implemented. Certain improvements will be made on the features that difficult. The recommendations to other users or hairdressers show a positive

outlook for most of tester, and improve the features to get more satisfactory outcome.

#### Ease of Usage



#### Recommending SukaFasta to Friends



#### 4) Summary of feedback. Summarize the findings from your feedback.

- 40% (5/12) of our respondents raised issues on input validation and alerts to inform them on whether their actions were successful
- More than 16% (2/12) of our respondents raised issues on the design, they would prefer a menu where users could input the time in hours and minutes
- Some users think the registration fields are many
- Users suggested that the following features should be added:
  - Adding description on the service added

- Edit and cancel booking
- Allow for multiple hairdressers and beauty salon to register and multiple salons and hairdressers
- Include pictures of services offered previously
- Add price on services
- Add rating or reviews
- Be able to find the beauty saloons near you
- Add chat option to message a hairdresser
- More than 80% of respondents are likely to recommend our app to others
- At least 50% of the respondents found the app easy to use

**5) Based on the feedback, what did you learn?**

- We learned that users care much about interactive applications, these interactions could be through clear error messages, confirmation message on button click
- Users are frustrated when a functionality is not working
- Users want the services on the app to have more description such as price of the services, etc
- People are more likely to use and recommend our app if deployed

**6) What was unexpected / what lessons did you learn?**

- Most of the users that tested our application were engineers and we did not expect them to pinpoint that some of the features such as setting time could be hard to use. What we learned from this is to always chose a simple design that will translate into a feature that is easy to use
- Testing the application on a real mobile device can bring out more issues that are not reflected on the emulator, such on phones with dark mode the colors of components were appearing purple rather than green and the input fields were not visible

**7) What worked, what didn't work?**

Features	Worked	Didn't Work
Login	Input of email and password; If email field is left empty a pop will call for the user to fill email and password Hiding password	Keyboard appears even when typing. (auto hide)
Create Account	Signup fields allow use to type and the keyboard format appears based on input; for phone number only numbers appear	The dropdown selection of hairdresser or Client. Returning the new user to login page after signing up

		When none of the fields in registration page is filled and sign up button is clicked, the app crashes
Navigation top bar	N/A	Back navigation didn't work, Same title on all pages
Navigation menu bar (bottom)	Could easily switch between menu bar	N/A
Confirmation Button (Add new Service/ confirm appointment)	N/A	Both buttons didn't show confirmation about task completed

### **8) What did you accomplish? Reflect on your time management.**

We were able to accomplish the user testing of the App using physical android phone and recording their feedbacks. The app developed is still at the first phase with limited features and some click events not responsive. The time allocated for the features development was managed effectively, however developing certain components took longer than expected. Managing team time for meeting and debugging was optimal.

### **9) Any changes to be made?**

- Adding app (launcher) icon,
- Add app splash screen
- Uploading of picture for adding services
- Home screen listing the services to be offered,
- Date picker trying not to access the past date for appointments,
- Add responsiveness to the buttons in booking app and add service,
- Complete development of home screen
- View, cancel, edit and delete appointments
- Change the set time design into dropdown