# **Carnegie Mellon University Africa**

# **Android Mobile App Development**

# **Envision phase project**

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# **Project 1: Hairdressing Salon booking appointment (SukaFasta)**

1. Vision

## **Objective**

To build an android application that:

- allows users to book appointments at hair salons and thus reduce the time they have to wait before getting attended to (within 15 minutes of the booked time) through a booking screen
- allows hairdressers to enlist and setup their services on the app through a registration screen
- allows hairdressers to manage their bookings using the app view, add, delete and update bookings through a management screen

## **Target customer**

Our target customers are hairdressing salons in Kigali who offer hair services to clients

## **Key benefits**

The product that will result from this project will benefit both the users and and the hair saloon owners as follows:

#### Benefits to users

- Better time management when going for hair salon services
- Identifying the hair salons close to their location
- Picking hair salon based on service provided and other customers reviews

#### Benefits to the saloon

- Reduce customer churn rate due to conflict in appointment time
- Increased visibility
- Better management/ handling of customers' appointments

## **Purpose**

The aim of our project is to help hairdressers manage their bookings and help users manage their time effectively.

#### 2. Mission

# **Product description**

SukaFasta is a mobile application that allows customers to book appointments at their preferred salon and with their preferred hairdressers, allowing them to save up time wasted on waiting for the hairdresser to finish serving someone else. To hairdressers SukaFasta is a tool that allows them to better service their customers by avoiding clashing appointments through proper management of bookings.

## **Minimum Viable Product (MVP)**

SukaFast MVP will include the following features

- Registration
- Login
- Setting appointments, date and time
- Choosing hairdresser
- Choosing services such as braiding, nail polishing, etc.
- Choosing braids or extension type and color

## Scope/boundaries

The scope of this project is limited to:

- One hairdressing salon
- Hairdressers and users who use android smartphones
- Our use case is Kigali

## Target users

Our target users are:

- men and women of age ranging from 20 to 50, who are students and/or workers who need hairdressing services
- Hairdressers who wish to setup their services on our app

# Competition

Although in our initial research there does not seem to be a similar product made specifically for the Rwandan community. Most of these apps are worldwide. Currently, the customers set appointments with their hairdressers by calling or texting them directly.

- Fresha: Subscription-free software that groups salon businesses by services. App allows users to book appointments, set up services and price and manage inventories.
- Pamperbook: Subscription-based mobile application that allows salon owners to set up their businesses. Features include booking appointments, consultation forms, reminders and payment processing.
- **Booksy**: allows salon business owners to manage their business and users to book appointments. Features include: calendar and bookings, payment processing, performance snapshots, etc.
- **Timely:** allows hair salons from Europe to manage clients bookings. Features include appointment, client management, timely consult and TimelyPay. This app allows their customers to manage clients, create and send forms, and take payments.

#### Differentiation

The uniqueness of our product resides in the fact that:

- Some of our competitors do not include hairdressing salon services in Rwanda. Our app will be specific to the Rwandan community.
- Setting up your business on Fresha app is not intuitive. In our case, we will make it simpler for our customers to setup their businesses
- It takes a couple of hours before your business shows up on the list.

#### 3. Success criteria

## Criteria for meeting your vision

- The hairdresser can setup his/her services on the application
- A user can select a service and book an appointment
- The hairdresser can see booked appointments

## How will you measure success?

We will measure success by piloting the application with at least one hair salon in Kigali, and 5 users. The following criteria will determine that our application is successful

- At least one hair salon in Kigali subscribes to our mobile application
- Rating of 4.2 stars on playstore from our app users
- The users can find hairdressing salons, select services from one and book an appointment

# **Project 2: Skills Assessment Mobile Application (Skills3.0)**

#### 1. Vision

#### **Objective**

To build an android app that:

- Allows the students to assess their skills level before taking a technical course and guide their decision on course choices
- Allows instructors to identify their students initial knowledge level for the course offered
- Provide recommendations to students on prerequisite courses to upskill

#### **Target customer**

Our target customers are tertiary level academic institutions.

## **Key benefits**

For students:

- Assess skills level they have before taking the course
- Get recommendations on materials to read to fill the gaps in knowledge
- Help them make decision on whether to take the course now, later or not

#### Instructors:

- Identify skills level of students and devise strategies on how best to help those with more knowledge gaps on the course
- They could use the assessment scores as criteria for enrolling students for courses that require prerequisite skills

#### **Purpose**

To allow students gauge their readiness for a course and to allow instructors to setup skill level assessments for their course.

#### 2. Mission

#### Product description/summary statement

Skills 3.0 is a mobile application that allows students to test their skills for the course they plan to take. For instructors Skills 3.0 is a tool for assessing skills level of students intending to take the courses they will be teaching and recommend materials that will help students prepare for the course.

#### **Minimum Viable Product (MVP)**

The following are the basic features of our application

Registration

- Login
- Add a course
- Create assessment
- Choose a course
- Take assessment
- View assessment feedback and recommendations

#### Scope/boundaries

The scope of this project is limited to:

- Carnegie Mellon University Africa for piloting
- Technical courses such as math courses, software engineering courses, and artificial intelligence courses

#### Target users

Our target users are university students who are trying to decide whether they have sufficient knowledge and background for a course they wish to take as well as instructors teaching technical courses.

## Competition

Canvas: is a learning management system. It allows instructors to set up courses and assessments such as quizzes, homeworks, and exams.

**Kahoot:** is a game-based online tool for creating quizzes. Features include customizable game templates, and private rooms for assigned learners.

**EdApp:** is a skill assessment tool with multiple learning management features including creating course content, setting up quizzes, PowerPoint converter, reporting and analytics.

**LinkedIn:** social networking application for professionals, with a skill assessment feature and courses

**Proprofs:** is a cloud-based centralized Learning Management Software that allows setting up assessment quizzes. Features include skills and psychographic assessments, quiz templates, completion certificates and reports.

#### **Differentiation**

- Our app is specifically designed for academic use as opposed to our competitor that focus on measuring skills level for employees
- Students can take assessments before enrolling in a course
- Our app will give detailed feedback on the performance of a student and provide recommendations accordingly

# 3. Success criteria

# Criteria for meeting your vision

- A student can take an assessment for a particular course
- An instructor can set-up a skill-level assessment

# How will you measure success?

- From our survey, 70% of users should find the app useful in helping them take next steps in regards to enrolling in a course
- At least one instructor sets up his course on the app