# Software Requirements

# DateX Inc.

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# 1. INTRODUCTION

For as long as romantic relationships have existed, people have sought assistance in meeting potential partners using whatever options were at their disposal. Matchmaking and arranged marriages have existed for centuries. More recently, technological developments from the VCR (videocassette recorder) to the (pre-internet era) personal computer have been enlisted, with varying degrees of success, in an effort to connect people with romantic partners.

Nowadays, there are many people using dating apps with the intention to find and meet new people. Every year there is an increase of users using these apps. There were more than 250 million dating app users worldwide in 2019 and it is expected to reach 300 million of users in the next 5 years. Then, people accept these technologies as a different way to interact and meet new people. Online dating is a system that allows or enables people to find and introduce themselves to potential connections over the internet, usually with the goal of developing personal, romantic, or sexual relationships. Nevertheless, users who aim to have a formal relationship are still struggling to find the effectiveness from this kind of system. Some of the main complaints from these users are that they are matching with the wrong person, awkwardness on the first date, the superficiality of these apps, and the overwhelming feeling to have plenty of conversations with many people. However, dating apps are so appealing and are popular for some of the reasons listed below:

➢ Quicker and more effective
➢ Better, alternate for people who have trouble meeting people in person.
➢ Opportunities to evaluate someone before meeting the person
➢ Easier way to meet people

# 2. SYSTEM ANALYSIS

As the goal of the application is to provide ease of use and to provide an interactive interface, extensive research has been done to gain an insight into the needs and behaviors of various users. The working application will be made convenient and easy to use.

## 2.1 PURPOSE

The mobile app seeks to enable people to find and introduce themselves to potential connections over the internet, with the goal of developing personal, romantic, or sexual relationships. The app will allow users to create profiles and upload personal information including (but not limited to) age, gender, location, and interests. Users will also be able to add photos and/or videos to their profile.

## 2.2 SCOPE

The application, being campus-based, seeks to target tertiary students. The initial deployment will be focused on KNUST campus. However, with growth, there is a possibility of the app being rolled out on other campuses of tertiary institutions.

## 2.3 FEASIBILITY STUDY

The primary objective of the feasibility study is to determine whether the proposed system is achievable. The feasibility is determined in term of the following aspects.

- Technical Feasibility: It was tested to see whether the system can be developed using existing technology or not. It is clear that the necessary software and hardware are available for development and implementation of our proposed system.
- Behavioral Feasibility: The targeted customers were surveyed for their behavior and analysis of their responses show that they are willing to use the app. The customers are using different types of devices to access both the mobile application and web application. The proposed system is able to accommodate all these devices and provide a user-friendly interface for all devices.
- Economic Feasibility: The proposed system is economically feasible in that analysis of targeted customers surveyed were very open free but somewhat open to ads and premium subscription.
- Legal Feasibility: The application is legal and as such, does not conflict with any legal requirements.
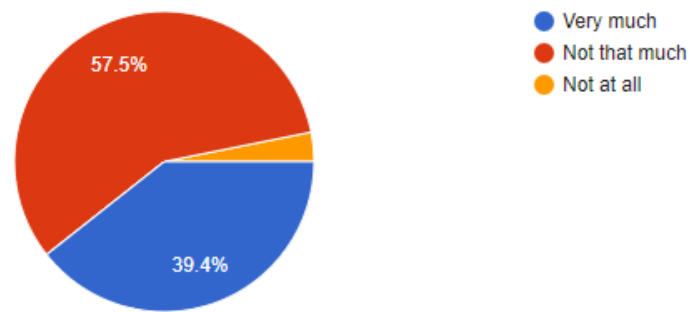
### 2.3.1 SURVEY SUMMARY REPRESENTATION AND ANALYSIS

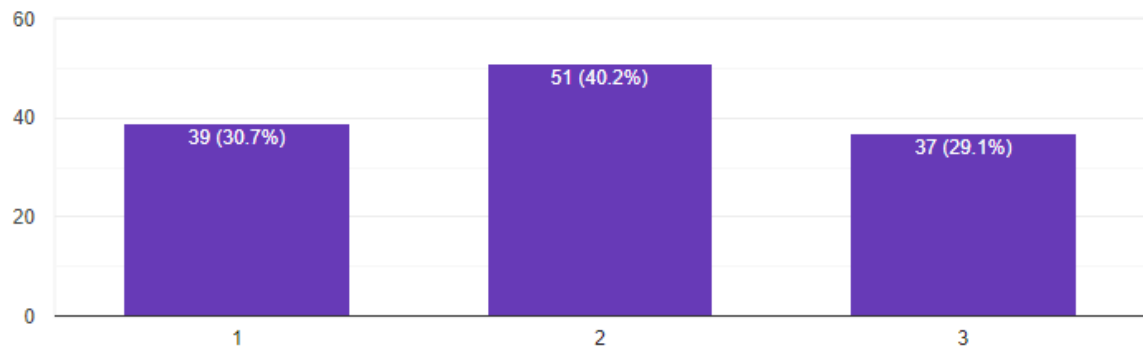What is your gender?

127 responses



- Male
- Female

27.6%

72.4%
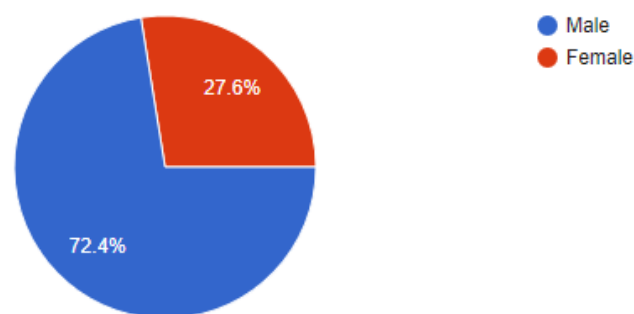
## How would you like to meet people online

127 responses



- Very much
- Not that much
- Not at all

57.5%

39.4%

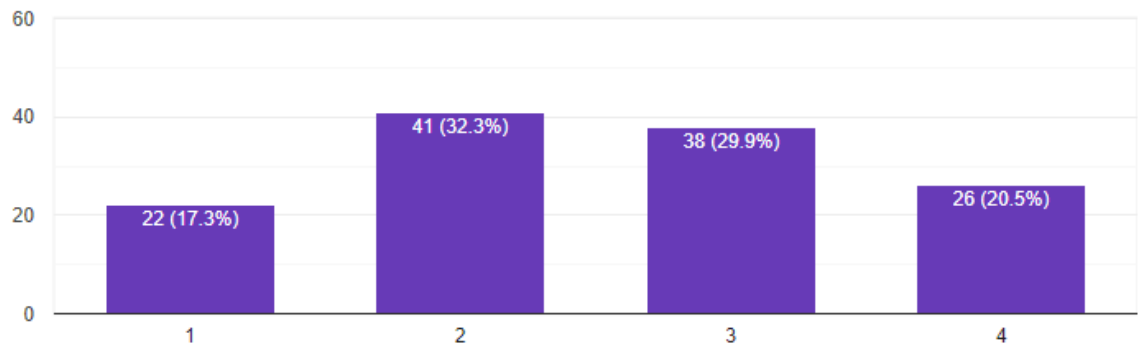## How open minded are you about meeting them through a dating app?

127 responses



On a scale of 1 to 3 on how open minded the targeted customers are about using a dating app, about 70% of the respondents were very open or somewhat open minded.

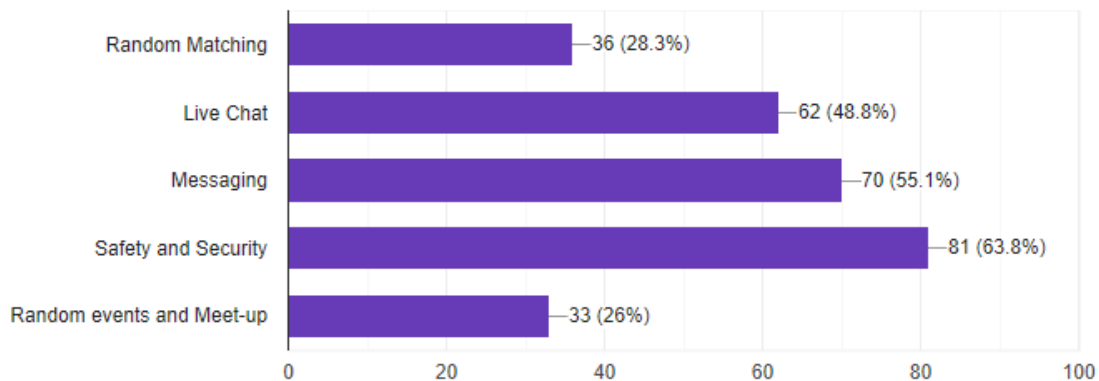**How likely are you to recommend the app to others**

127 responses



On a scale of 1 to 4 on how likely the targeted customers are to recommend the app to others, about 70% of the respondents were very or somewhat likely.

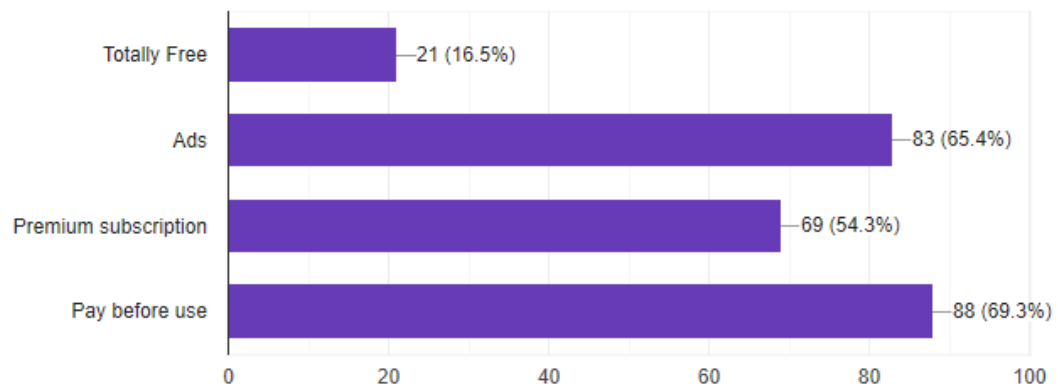**Which of these features would you prefer in the app**

127 responses

## Which of these features do you want excluded from the app

127 responses

| Feature | Value |
|---------|-------|
| Totally Free | 21 (16.5%) |
| Ads | 83 (65.4%) |
| Premium subscription | 69 (54.3%) |
| Pay before use | 88 (69.3%) |

## Have you ever used a dating app or website?

127 responses

- Yes
- No
- Prefer not to say

81.9%

14.2%
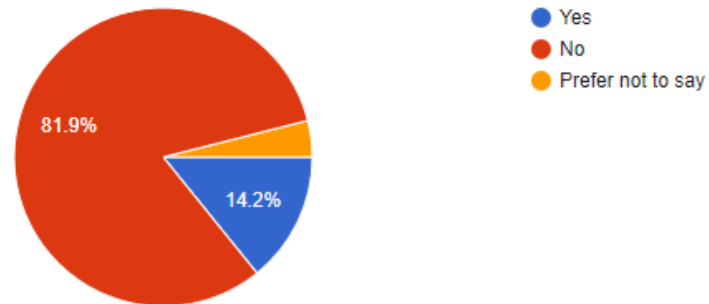
What are your reasons for patronizing a dating app?

127 responses

| Reason | | |
|---|---|---|
| Fun | | 45 (35.4%) |
| Just getting to know people | | 64 (50.4%) |
| Quicker and more effective | | 16 (12.6%) |
| Easier way to meet people | | 40 (31.5%) |
| Opportunity to evaluate people before getting to know them | | 34 (26.8%) |
| Better alternative for the shy type | | 48 (37.8%) |

# 3. SYSTEM REQUIREMENT

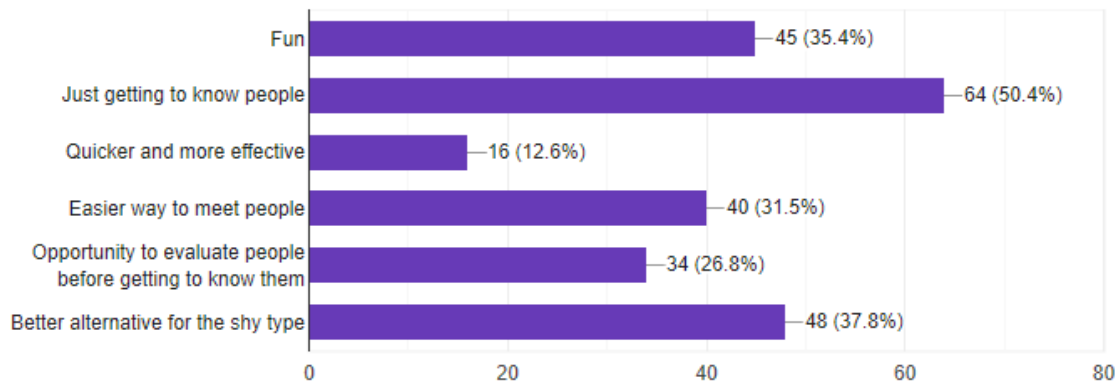## 3.1 User Class and Characteristics

There are two (2) kinds of users for the proposed system.

- Administrators:  Administrators are responsible for carrying out the administration and business of the system. Administrators can see the users' activity and view feedbacks given by users. They also manage the database of the system.
- Users: Users request for services of the dating app and they give feedback for service.

## 3.2 Functional Requirements

### 3.2.1 USERS

➢ REGISTRATION

One can have a conversation through the dating app. Before you can use the dating app, you would have to register through the mobile app. A user interacts directly with the mobile app, registering with the following information:

- Full name
- Phone number
- Email
- Password
- Gender

➢ LOGIN

After registering, the user's information is stored in the system's database for future reference. To log in to the app, the user inputs their email and password provided during registration.

There is an option for users to be automatically logged in every time they open the app.

➢ PASSWORD RECOVERY

There is a password recovery option when users forget their password. It can be recovered from the system's database by the user entering his or her email or phone number at the "forgot password" page. If the email and phone number entered do not match any in the database, he or she is then required to create a new account before he or she can use the app.

➢ MATCHING

If a user enters the system and presses the search button, there would be an interface which does a random matching, bringing out a number of matches with similar interests. The user then selects any of the matches to chat for a limited time. If compatible, the user then taps a button to indicate interest, which the other end must do same to move to permanent chat. Otherwise moved to the next match.

➢ RATE SCORES.

A user on the app will be rated by people they encounter. These will be added to their profiles to enable them get good matching.

➢ ONLINE STATUS

A users status will be indicated as online or offline depending on their availability at the moment.

➢ FEEDBACK

The app also allows the user to send suggestions, complaints and feedback through the comment page to the administrators. Responds are sent directly to the users through their emails.

## 3.2.2 ADMINISTRATOR

Administrators' accounts will be fused into the database with administrators' accounts having different access levels. Higher levelled administrators can add other administrators. In the database, higher levelled administrators will already have their details consisting of their:

- Full Name
- Emails
- Password
- Contact

### CLIENT ACCOUNT VIEWED FROM ADMINISTRATOR DASHBOARD

Client accounts can be viewed from dashboard. Details of account that can be viewed consists of:

- Personal information
- Emergency Contact
- Activity logs
- Trip Requests
- Trip Payments

All Administrators are given the privilege of either activating or deactivating a user's account from the dashboard.

## 3.3 Non- Functional Requirements

Apart from the functional part of the software, there are non-functional parts that do not exactly perform a particular action but are crucial nevertheless. These consists of attributes such as security, performance, usability etc.

Usability: All users of the application are able to search for prospective partners through our matching algorithm and also use other features of the applications easily without having prior knowledge.

Reliability: The application software are reliable in that the software will not crush every now and then making it impossible to use the app. There is no specified period in which the applications can be used. The applications are available 24/7. In addition, the database will be continuously updated and as such, accurate information will always be provided.

Performance: There will not be frequent failure of the application especially when it is being accessed by a number of people.

Supportability: Since the applications are going to be used on a wide range of devices, it is in a format that supports all these different devices such that users can access features and application without any issues.

Legal:  The applications are legal since no laws are broken in the creation and development of the proposed system.

Maintainability: The application gives room for maintenance after the development of the applications. Updates can be done to the applications as and when needed.

Security: The system's data will only be accessible by authorized administrators. Sensitive data will be encrypted before being sent over insecure connections.

Portability: The app would be available on all mobile platforms and as such very portable.

# 4. SYSTEM DESIGN

Below are low fidelity images of our system

9:41

**Sign Up**

Name

Name

Name

Name

Click Me

9:41

9:41

Random Match

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9:41

Timer
3:42

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