



MENTALLAB

Problem statement

Since early 2020 when the COVID pandemic sprung out in Malawi, the country has seen a rise in the number of suicide cases reported. In 2020 the rate rose to 57%, and in 2021 the percentage went up to 121%. The Malawi Police Service has revealed that 58 people have committed suicide in the month of October alone this year. According to Deputy National Police Public Relations Officer, Harry Namwaza, the figure has increased as compared to the same period last year when 44 committed suicide in the same month. Out of the 58 cases recorded this year, 55 were men and three were women whilst last year, out of 44, 41 were men and two were women.

Broken relationships, debts and drug and substance abuse have been singled out to be the main reasons for the rise in the cases which have mostly affected the youth. During this period, curfews and lockdowns were imposed, restricting movement and interaction. A good percentage of the public got laid off after companies accumulated losses. This resulted in frustrations as people could not even afford basic necessities and let alone could not move freely to find other employment opportunities. People felt helpless as they could not air out the issues they were facing as interactions were limited. Feelings and emotions were bottled up as they were living in their homes. When some could no longer endure it and they took their own lives. COVID's aftermath is even more devastating, exacerbating the country's already dire situation. Inflation rates skyrocket, a bag of maize that was sold for K10,000 in 2020 is now selling for K22,000, and to add fuel to the fire, the price of fertilizer triples, and people have no idea if they will even be able to afford a bag of fertilizer for the upcoming planting season, leaving many even more frustrated. With such a tragedy, there was a need for the community to devise a solution for the public to be able to talk about their problems and seek help while at home.

Mental Lab is a mobile application that will strive to help improve the mental health status of people in Malawi. The application was developed by Sparc Systems Limited in collaboration with an NGO called Caring hands. The application is designed and developed to provide people with mental health awareness through news articles, myths, videos, and question tag quizzes. The application strives for early intervention by giving users access to mental health materials and service providers like therapists. Users of the application have access to a group chat on which they can talk to fellow users going through the same issues and in that way, people feel better and safe knowing that they are not facing these issues alone. The application also allows users to book sessions with therapists on which they can have one-on-one voice or video sessions.

Goals

1. Accessibility

- The system is accessible from both Android and iOS devices making it accessible to almost all users having a smartphone. It also delivers constant real-time information.
- The application is localizable, so users may interact with it in their preferred/native language. The application is now available in English and Chichewa.

2. Security

- Mental Lab is exceptionally secure since it uses multiple security elements to ensure that the person who is accessing the system is both authenticated and permitted to do what he or she can in the system. It reduces the likelihood of data breaches because a user is only exposed to information related to his or her account.

3. Scalability

- The system is scalable. It can handle more data without any effect on its overall performance. As more data is added, the system can process it cost-effectively.

4. Easy to use

- Mental Lab has an informative and user-friendly interface that is easy to learn and use. Since it is easy to use, users are less likely to have challenges navigating through it. Hence helping users to do their tasks properly and efficiently.

5. Effectiveness and Efficiency

- The system is able to process large volume of data in an effective and efficient manner that help the user reap the benefits from it

6. Availability

- The system makes use of a light database, SQLite to cache some data on the user's device, allowing the user to still be able to use some of the features of the application when internet connectivity is not available.

7. Sustainability

- Clients are expected to pay for one-on-one sessions with service providers in order to keep the system running. The money collected is distributed between system maintenance and payment to service providers.

Features

CORE MODULES
User Managment
Content management (videos, news, myths)
Session management (Audio & Video Sessions)
Quiz
Group Chat

Role based access

ROLES	FUNCTIONS
1. Client	<ul style="list-style-type: none">• Able to register as a user of the application• Able to participate in various group chats.• Able to view content uploaded. E.g., videos, news articles, myths.• Able to take quizzes.• Able to book a session with service providers
2. Administrator	<ul style="list-style-type: none">• Able to manage content (videos, news articles, myths and questions for quiz)• Able to manage user accounts (add, edit and delete accounts for the system)
3. Service Providers	<ul style="list-style-type: none">• Able to set available slots for sessions• Able to view booked sessions with clients• Able to start or pickup session calls• Able to view session reports• Able to create groups

Output

Below are some of the pages from the system;

1. SPLASH SCREEN



MENTALLAB



2. LOGIN PAGE



Log In

Let's get to work

[FORGOT PASSWORD?](#)

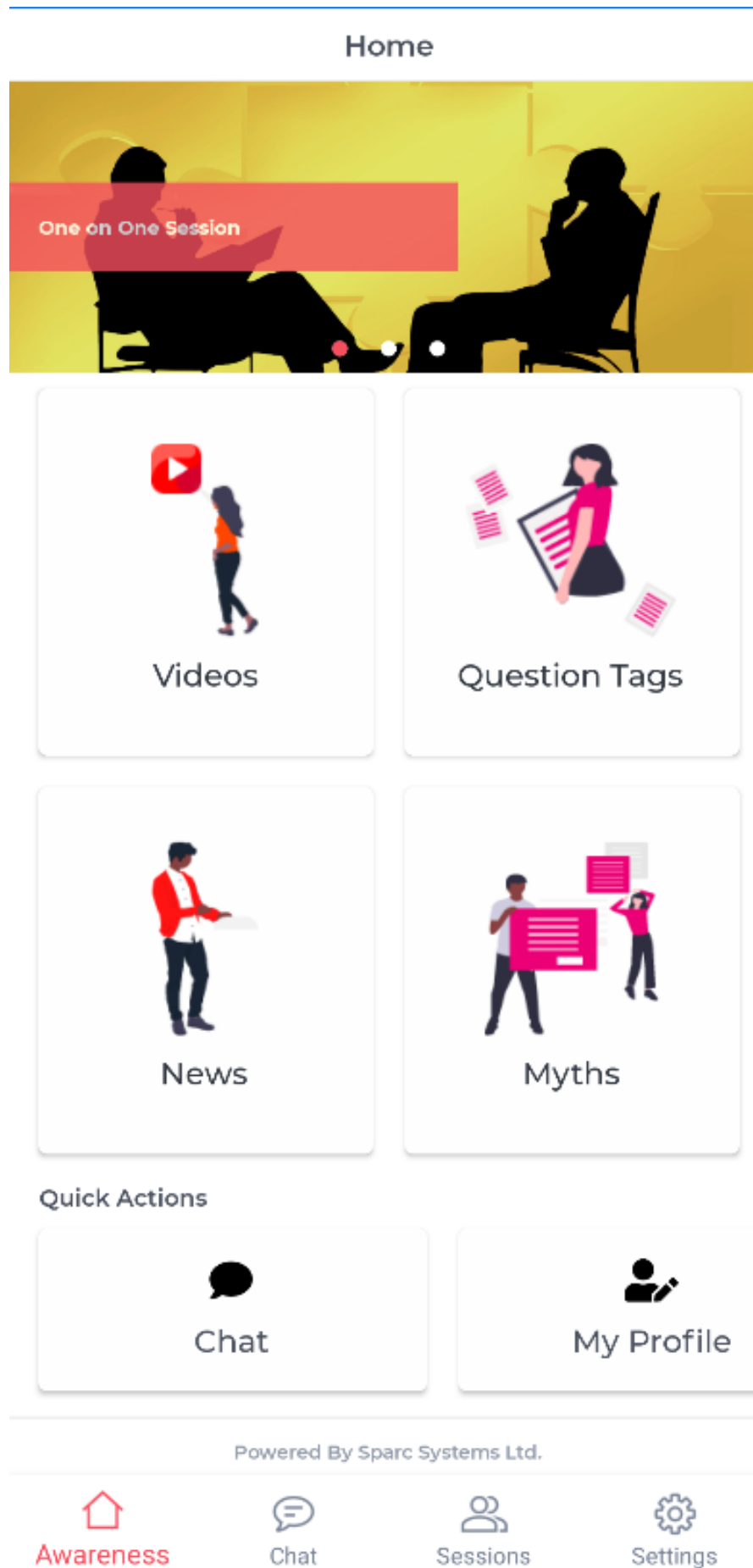
Log In

Don't have an account? [Register](#)

[Change Language](#)

Powered By Sparc Systems Ltd.

3. HOME PAGE (ENGLISH)



Tsamba Loyamba



Makanema



Ndagi



Nkhani



Nthano

Zochita Mwachangu



Macheza



Mbiri Yanga

Powered By Sparc Systems Ltd.



Kuzindikira



Macheza

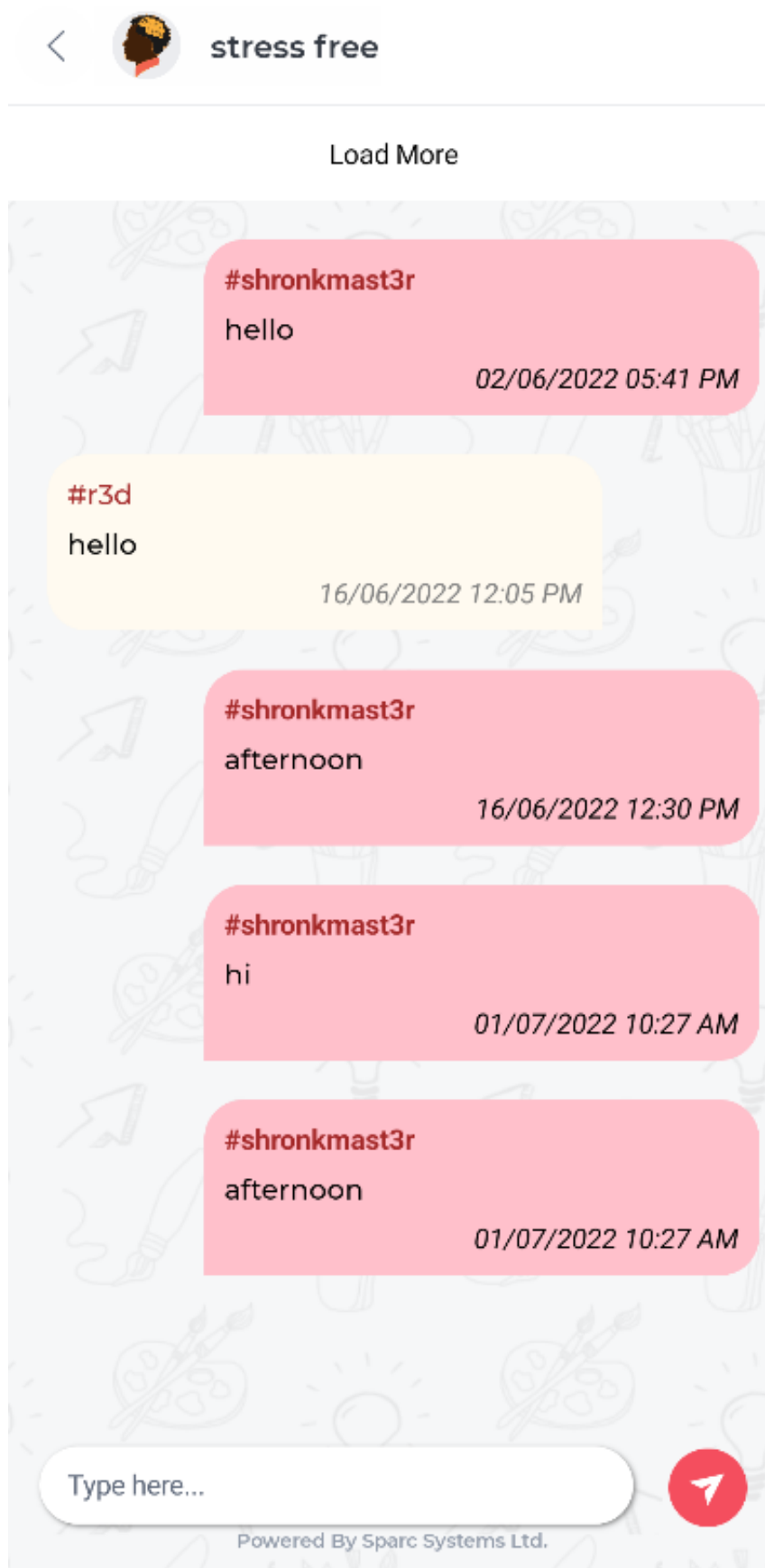


Mikumano




Makonzedwe


4. GROUP CHAT




5. BOOK SESSION



• **James Banda**

 Mental Advocate

 • Anxiety disorders • Depression

Fri, 14 Oct 2022

×

▼

08:47 AM

×

▼

Voice Call

×

▼

I am having trouble concentrating

Anxiety disorders


×


▼

Book Session

Powered By Sparc Systems Ltd.

6. MAKE PAYMENT

 Make Payment

CREDIT CARD

5204-7300-0000-2662

Card Holder

Jonh Banda


Expiration

10/25

CVV

XXX

Card Number

5204-7300-0000-2662

Expiration date

10/25

CVV

...


Name On Card


Jonh Banda

Submit

Powered By Sparc Systems Ltd.

7. SESSION CALL

Session Call



Meeting Credentials

Meeting Id :	Password :	Amount Paid :
87983866645	068295	MWK10000

Join Call

Brief Info of Session

New session

SESSION CALL (CHICHEWA)



Tsamba La Mafoni



Zidziwitso za Msonkhano

Id ya Msonkhano :	Mawu	Ndalama
87983866645	achinsinsi : 068295	Zaperekedwa : MWK10000

Yankhani foni

Cholinga
New session

Powered By Sparc Systems Ltd.

8. VIDEOS



Videos



15JUNE CARING H...



20 JULY RESTORI...



29JUNE CARING H...



RESTORING 22 S...



RESTORING LIFE



RESTORING LIFE ...

Powered By Sparc Systems Ltd.

DEVELOPED BY SPARC SYSTEMS LTD

www.sparcsystems.africa