1.0 Introduction

The University of Zimbabwe has since undertaken the mandate to involve its students on the implementation of Education 5.0 where a student is supposed to be characterized by the integration of advanced technologies like Artificial Intelligence, Internet of Things and Virtual Augmented Reality among other technologies. Education 5.0 enforces the student to pursue personalized learning, immersive experiences, decentralized credentials, smart classrooms, lifelong learning, accessibility and teacher support. In support and practise of the implementation of Education 5.0, Smart Tech Cluster is undertaking the following innovations as a way of improving the society in which the University students relates with, below are applications which are being developed and attached to this document are two apk installation files for the two applications with instructions on the read me file.

2.0 Mental Healthcare Companion

Mental Health Care application is an application designed to cater for various students at the University of Zimbabwe with various mental health problems, from depression, drug addiction among other mental health problems. It is still being developed and below are some of the features which it is now equipped with.

2.1 App Shortcut

An apk file for the app was derived by the developer for testing purposes, physical installation on android phones was done to experience the work developed thus far. Below is the image of the mental health care application installed on an android phone

Figure 2.1: Mental Health Care App Shortcut

2.2 Splash Screen

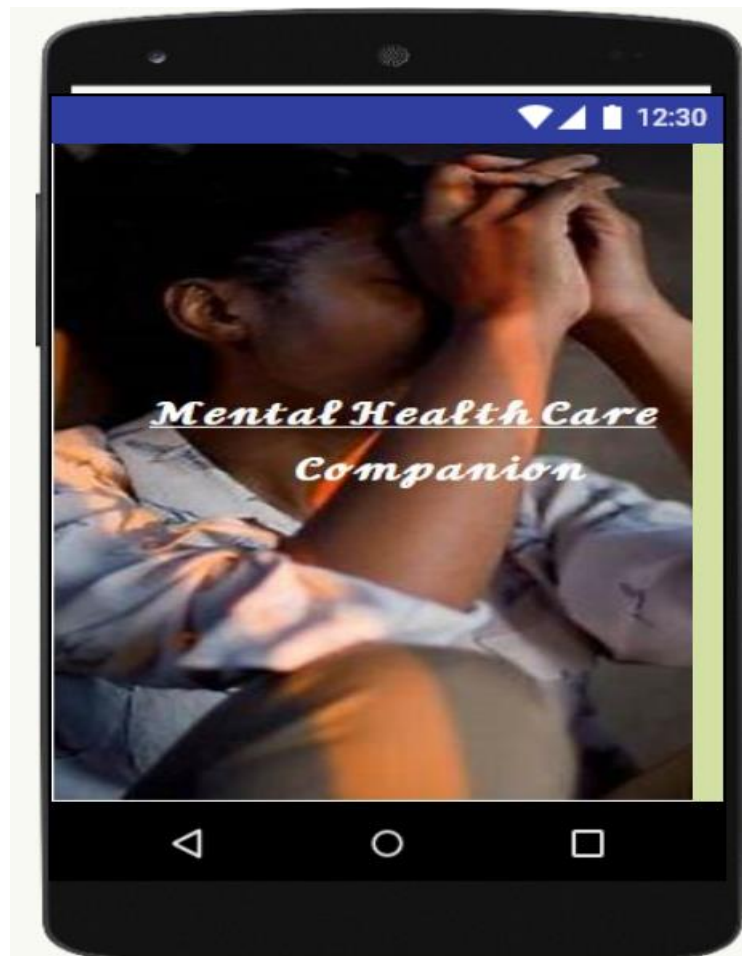This is the screen which opens upon clicking the app shortcut on your android phone

Figure 2.2: Mental Health Care Splash Screen

2.3 Mental Health Care Home Screen

This is the home screen of the Mental Health Care app; it is coupled with inbuilt random health quotes which are responsible to cheer up the user as the user opens the application
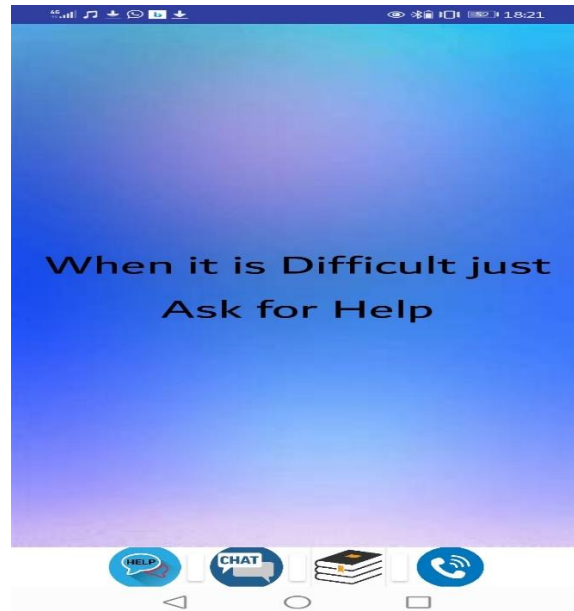

Figure 2.3: Auto Generative Health Care Quotes Home page

2.4 Menu Tab

Below is the menu tab which the user uses to navigate the menu:

1. Help Tab
2. Chat Tab
3. Online Health Care links and Books Tab
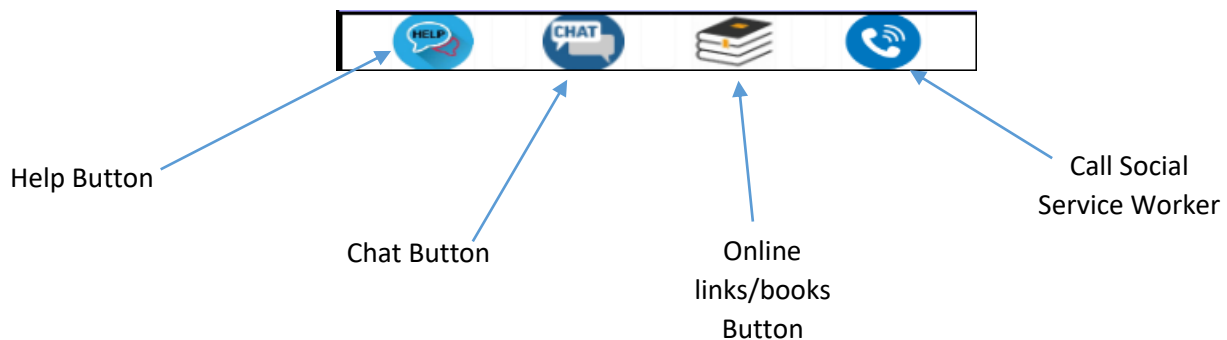4. Call Social Worker Tab

Help Button

Chat Button

Online links/books Button

Call Social Service Worker

Figure 2. 4: Menu Tab

2.5 Help Tab

This one is responsible for the user to read about various health disorder descriptions, below is the Help Tab where the user gets to click the "How are you feeling tab ". Upon clicking the tab a list of disorders prevail for the user to get more insights about how they are feeling
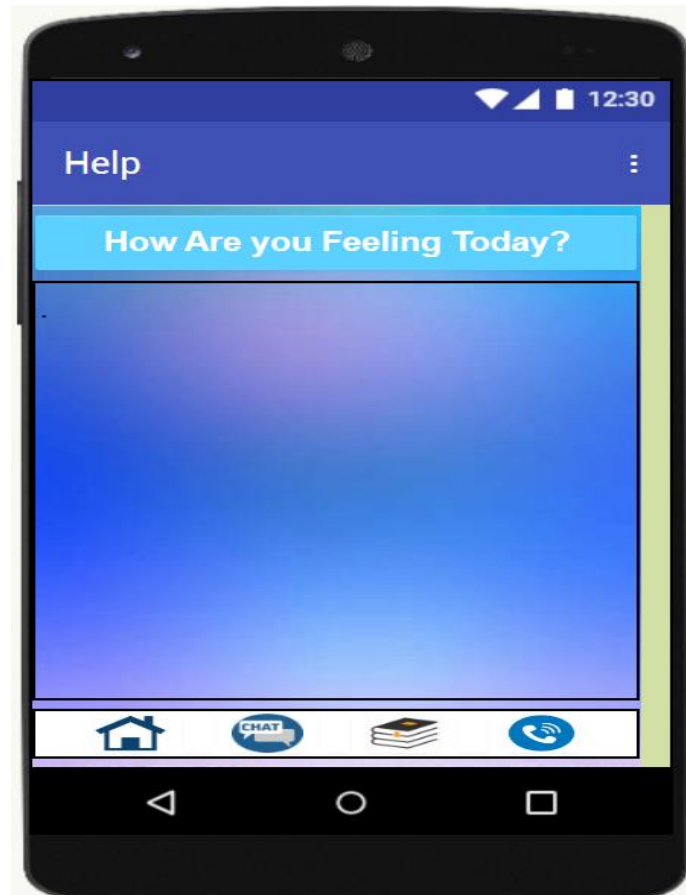

Figure 2.5: Help Tab

Upon Selecting the how are you feeling on this help tab, the following is an output of mental healthcare descriptions
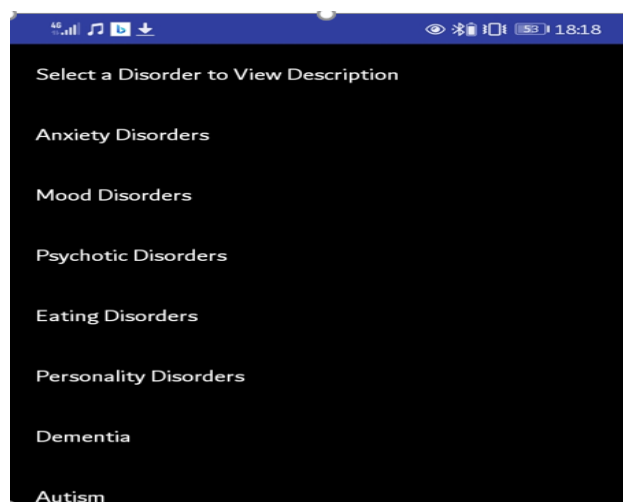

Figure 2.6: List of Disorders

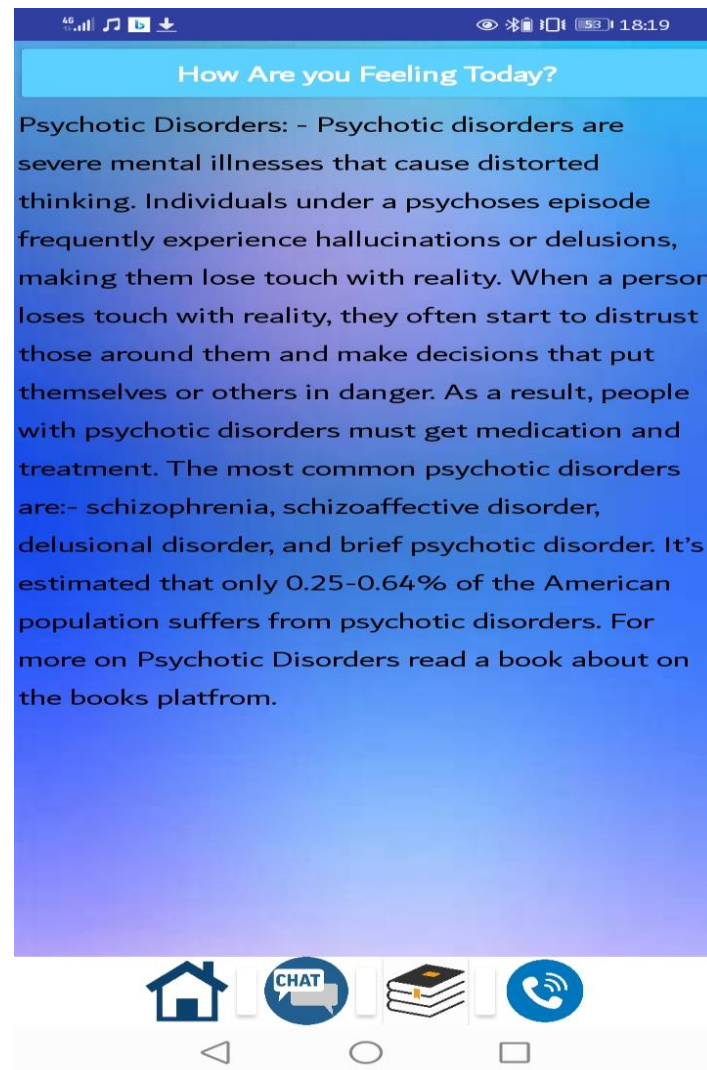Upon Selecting one of the disorders on the list for description, the following screen is presented:

Figure 2.7: Disorder Description

2.6 The Chat Tab

This tab provides a community like platform where when a student or staff has some difficulties and would want to air a problem to other colleagues, there is a provision to write a message and provide a name if the sender wants to be known if the sender is not willing to be known he or she may provide the name coupled with the message. Colleagues may respond to the message as a way of trying to solve a problem. Below is a screen showing some of the messages which were sent whilst testing the app.
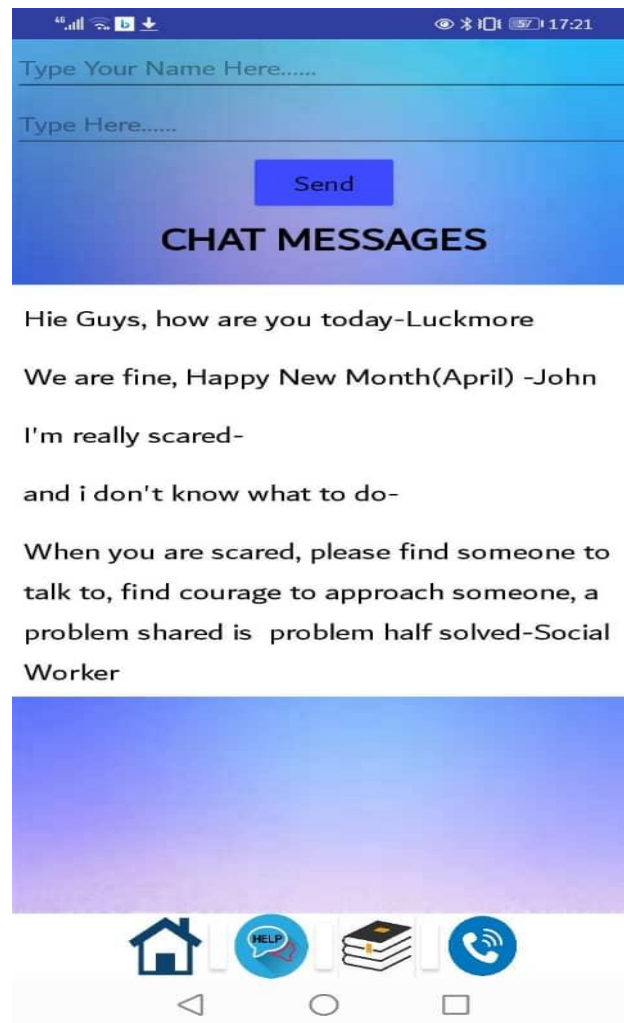

Figure 2.8: Chat Tab

2.7 The Online Links/Books Tab

This tab is responsible for the user to have an extended understanding of how to manage mental health problems, these links and books are embedded in the application and below is a screen to show links to extended content
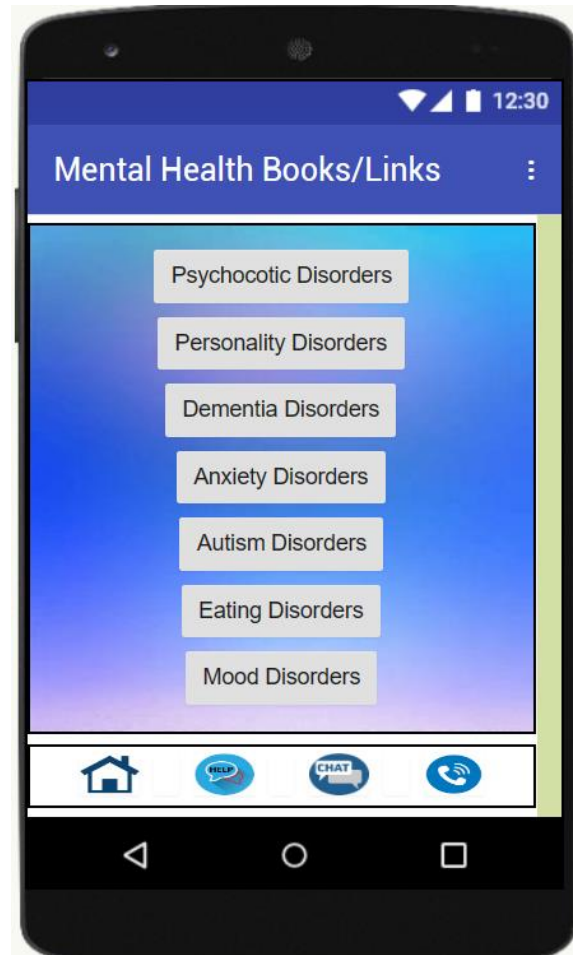

Figure 2.9: Mental health Links/Books

Upon clicking on one of the links, a redirection to a specified link according to the subject which the user is interested on, the following is an example of a clicked link
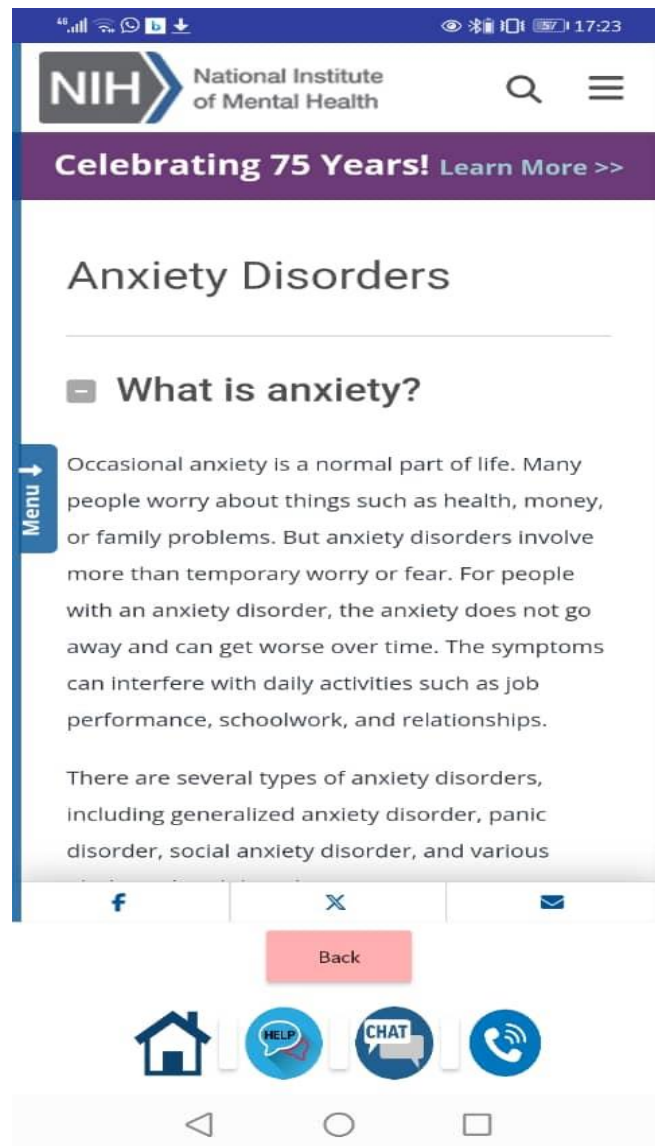

Figure2. 10: Anxiety Web Page

3.0 Gender Based Violence App

Gender Based Violence is an application which intends to provide a platform for victims to be able to register their credentials before using the applications, also to be able to have an eased access to authorities which may be of help in times of need. The following are the features of the GBV app

3.1 Shortcut

The following image is a shortcut to the GBV app which was installed on an android phone for testing purposes by the developer. It enables the user to kick-start the use of the application.

Figure 3.1: GBV Shortcut

3.2 Splash Screen

The following screen is the splash screen; it is a graphical screen which appears at the launch of the GBV application

Figure 3.2: GBV Splash Screen

3.3 Login Screen

This screen is responsible for validating and authenticating users who get access to the application, if a user is not registered an option for sign up is available, the screen below will be used as a security feature to allow only registered users to access the application

Figure 3.3: Login/ Sign in Page

3.4 Firebase Database

This is the database which will be used to store user credentials for the application's registered users, it shows the usernames and passwords of the registered users. Firebase is NoSQL cloud based database provided by Google Firebase. It allows developers to store and synchronize data in real time, below is the image of how a firebase database environment looks like
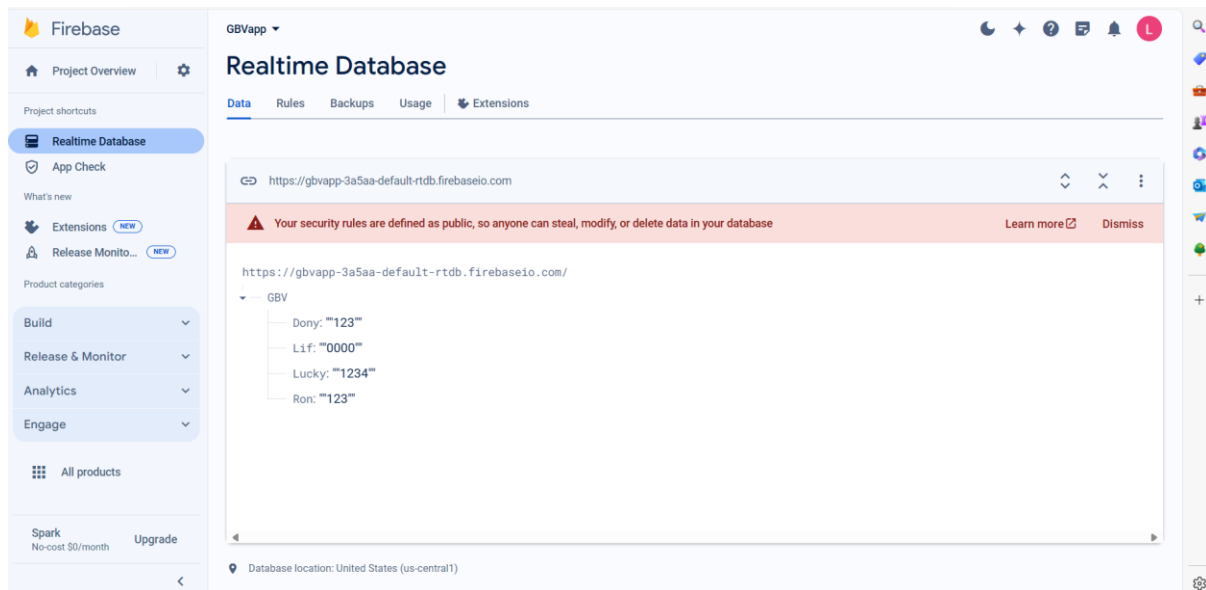

Figure 3.4: Firebase Real-time Environment

3.5 GBV Menu Page

Upon accessing the system, the home page prevails and it provides tabs to help the user to navigate the application, the image below shows the GBV Home Page
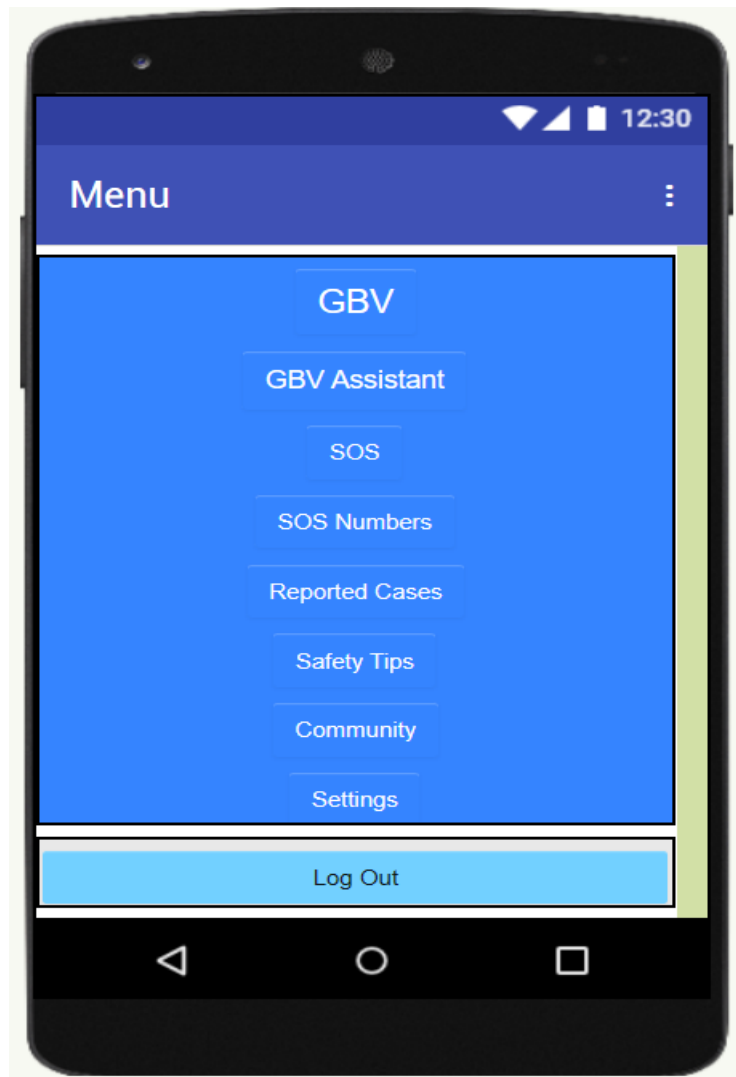

Figure 3.5: GBV Menu Page

3.6 SOS Tab

SOS is an international Morse code distress signal which means "Save Our Souls". it used to signal a life threatening emergency in this case, we consider the user to use the SOS tab to alert the authorities responsible for helping gender based victims in a society. The following Page shows an SOS page with two authorities which are currently being used by the developer to test the application. The developer used the NGOs and Police as the authorities which can help the GBV victims, the numbers of these authorities are embedded in the system and can be always updated by the administrator in case of change of personnel due to varied reasons. For testing purposes, Mr Mutindindi has been assigned as Police and Dr Masunda as an NGO Member, the user will have to press the call button to make a call and direct calls to respective numbers are initiated for help.
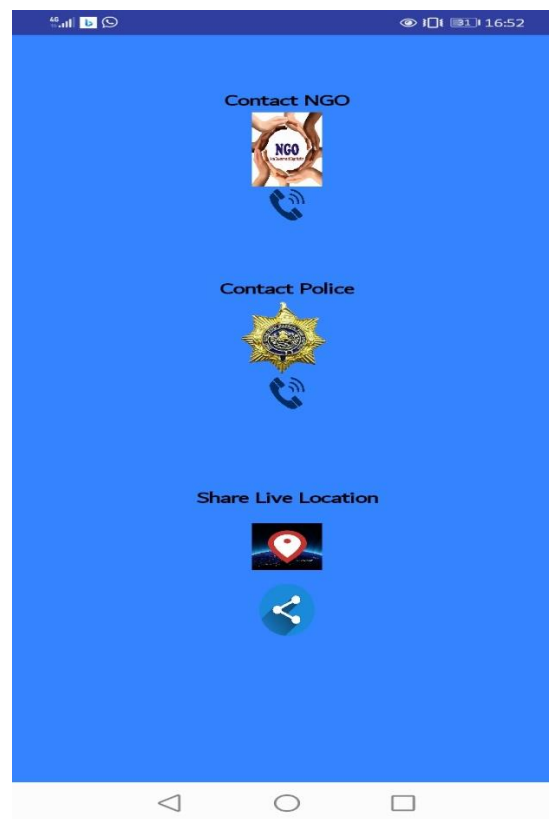

Figure 3.6: SOS Page

4.0 Future Tasks

The developer is looking forward to accept various contributions from the team he is working with and also, there are pending tasks on the two applications which need to be perfected

4.1 Mental Health Care Application

This application has the following tasks pending to it:

- Development of the call social worker platform
- A request to quiz the user using the Help Tab was requested by one of the users and is still yet a pending task
- A look forward into uploading this application on Google play store

4b.2 Gender Based Violence App

The application has the following tasks pending:

- A lot of modules have not yet been done, with the login and sign up module done and the SOS as well, functioning properly, the developer is looking forward to develop a Gender based Assistant which is a Gender Based Chabot which will be embedded on the GBV App
- The developer also seeks to develop the Community platform for Gender Based Violence Victims
- The developer also seeks to provide a page which will empower the users of the application with safety tips upon encompassing a gender based circumstance
- A provision of additional SOS numbers will be added to the application for users to have more reliable personnel to base on in case the ones embedded on the app aren't getting through for help.
- A live location module will need to be added, where the user can share location where a GBV circumstance is happening for authorities like police to be able to help, or a nearest NGO facility where the GBV victims can rely on for help.