User Manual



CA400

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1. Installation Guide

1.1 Hardware Required

In order to use this application, the user must have an Android mobile device (or emulator) and a stable internet connection.

1.2 Installation Guide

Android Studio Application

- 1. Install Android Studio using the following link and instructions: Download Android Studio and SDK tools
- 2. Visit the following GitLab repository and clone it: https://gitlab.computing.dcu.ie/boylaj27/2022-ca400-boylaj27-smythk33
- 3. If using an Android smart device, enable developer options. Then, visit the device's settings and enable USB Debugging. Further details on how to accomplish this can be found here: Run apps on a hardware device | Android Developers
- 4. Connect the Android device to the PC using a USB cable. Alternatively, set up a virtual device and run the application using an emulator. More information on how to accomplish this can be found here: Run apps on the Android Emulator
- 5. Open the project in Android Studio.
- 6. At the top of the screen, click "Run".

Stanford CoreNLP Server

- Vist the Stanford CoreNLP website and download the most recent version of StanfordCoreNLP: https://stanfordnlp.github.io/CoreNLP/download.html
- 2. Unpack the zip file into the StanfordCore directory in the project.
- 3. Run startstanfordserver.sh in the terminal to start the server.

Ngrok Tunnel

- Vist the Ngrok website and download the most recent version of Ngrok: https://ngrok.com/download
- 2. Unpack the zip file into the Ngrok directory in the project.
- 3. Run startngroktunnel.sh in the terminal to start the server.
- 4. Once the tunnel has started, copy the link and paste it into the url variable of the Specific Chat Activity to allow the app to connect to the server.

Python 3 Installation

- 1. Install Python 3 on your device using the following instructions: https://www.python.org/downloads/
- 2. To run the summarisation.py file, the following libraries must be installed using pip as follows:

```
pip install requests

pip install transformers

pip install tokenizers

pip install torch

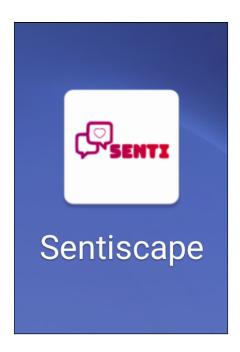
pip install sentencepiece
```

3. Run the Python script summarisation.py in the following file path:

```
src/Summarisation
```

2. User Guide

2.1 Opening the Application



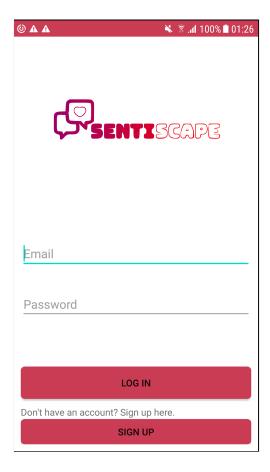
The application can be opened by choosing the "Sentiscape" app from the home screen of the Android device.

2.2 Splash Screen



The user is greeted by the splash screen upon opening the app. After a few seconds, they will be brought to the main application.

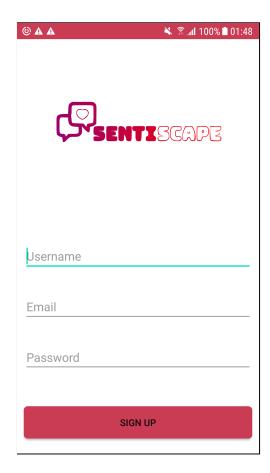
2.3 Login Screen



The user can see the login screen here. They can enter their username and password, then select the "Log In" button to sign in.

If they don't have an account, they can click the "Sign Up" button to create an account.

2.4 Sign Up Screen



The user can create a new account on this screen. They can enter a username and a password. They must also include an email address upon account creation. Then they can press the "Sign Up" button to create their account. This will lead the user to the onboarding screens.

2.5 Onboarding Screens

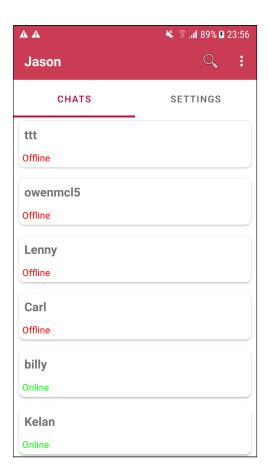


After users sign up for the first time, they will be taken to a series of screens that explain the unique functionalities of the application, such as the Summarisation and Affection features. Here, they can swipe back and forth between the screens in order to gain a full understanding of how the application works. At the final screen, they can swipe out of the onboarding screen and they'll be brought to the main screen.

2.6 Main Screen

This screen allows the user to switch between 2 different tabs. The first is the "Chats" tab, where users can start conversations with other users. Then, there is the "Settings" tab where users can adjust the app's settings. The user can either swipe between these tabs or press the tab buttons to switch between them.

2.7 Chats Tab



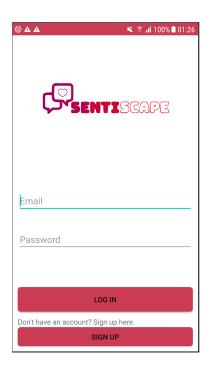
On the Chats tab, users can view a list of Sentiscape users. By clicking on a user, they can begin messaging them. There is also a search bar where users can search for other users instead of having to scroll through every single user.

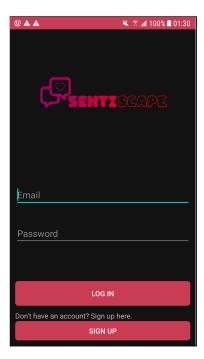
For each user, their name is displayed as well as their online status. The name that appears on the screen is their username and they will appear online if they're logged in and using the application and offline if they are logged out or not using the application.

2.9 Settings Tab

The user can switch between dark mode and light mode, log out of the app, or delete their account.

Dark Mode





Pressing the dark mode icon turns on/off dark mode across all screens in the application.

Log Out Button

When the user presses the "Log Out" button, they will be logged out of their account and brought back to the login screen.

Delete Account Button

When the user presses the "Delete Account" button, their account will be deleted and they will be brought back to the login screen. In order to log in again, users will have to create a new account.

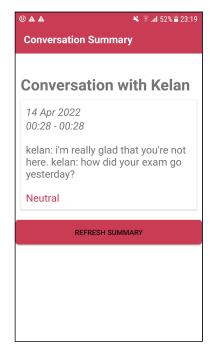
2.10 Messaging Screen



On the messaging screen, users can message each other back and forth using the Android keyboard. Once they send a message, the Affection feature will decide on the sentimentality of the message and change the message bubble to positive (orange-yellow), negative (cyan-blue) or neutral (pink-grey). The message bubbles will also contain a smiling emoticon for positive messages, a frowning emoticon for negative messages and a neutral emoticon for neutral messages.

Users can press the summary button on the top-right corner of the screen (inside the toolbar). This will bring them to the summary screen.

2.11 Summary Screen





The user can view a summary of the conversation that's been had over the past 24 hours. On this screen, they can see the name of the user they conversed with. Inside a card view, they can also see the date of the conversation and the timespan in which the messages were sent. Below that they can read the conversation summary and see the predominant emotion displayed in the conversation. Depending on the predominant emotion felt, the card view background will change to an appropriate colour.