ANDROID STUDIO

Implementation is completed in Android Studio, the official IDE for Android.

TWITTER4J

Twitter4J, an unofficial Java library, is used to acccess the Twitter API.

SENTIMENT DICTIONARIES

Each word in a in tweet is compared against terms in two sentiment dictionaries - one positive and one negative.
Both dictionaries also contain a selection of popular emoticons.

```
3  :')
4  :)
5  :))
6  :*
7  :-)
8  :-D
9  :-DD
```

```
227 loving
228 loyal
229 loyalty
230 luck
231 lucky
232 luv
233 luxury
234 magic
235 magical
236 majesty
```

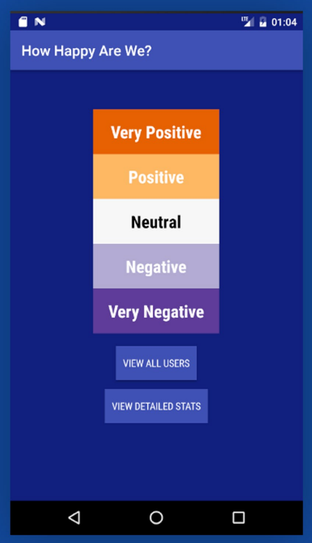
```
310 nag
311 nah
312 nailed
313 narrow
314 nasty
315 nauseating
316 negative
317 neglected
318 nerve
319 nobody
320 nonetheless
```

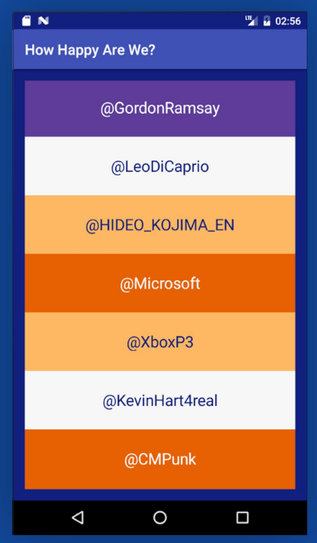
```
1  -.-
2  :'(
3  :(
4  :-(
5  :/
```

THE HAPPINESS EQUATION

$$H_u = \frac{p_u - \mu_{pd}}{\sigma_{pd}} - \frac{n_u - \mu_{nd}}{\sigma_{nd}}$$

Attempts implementation of the 'Happiness equation' proposed by Adam D. I. Kramer. This normalises a user's happiness relative to all other users on the day.
A user is 'only remarkably positive if they are positive on the day in question'.



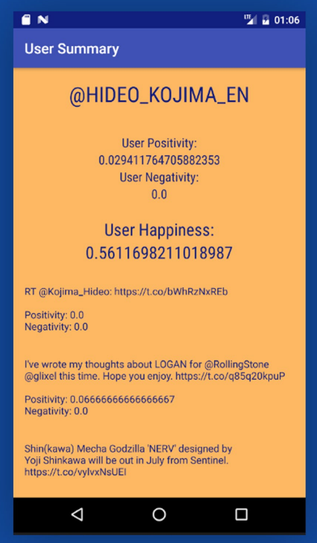


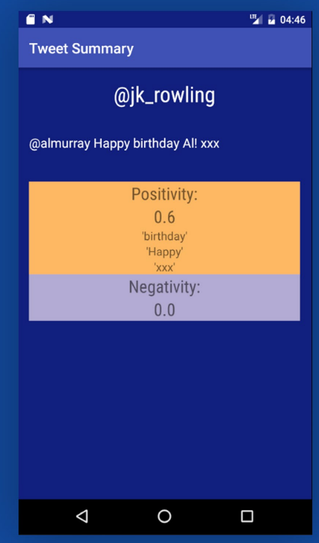
The user can choose to view either the groups as a scale, or all users coloured to represent their group.

WHAT IS IT?

An Android application which analyses the happiness of friends, or other accounts being followed, on a given day.
Users are placed into a group representing their happiness. These can be selected, along with users and tweets, to provide a summary of the analysis completed.

Provides more personal results to already existing applications.





Users can be selected to get a summary of their positivity and negativity, along with their tweets. A tweet can be selected to identify any sentiment terms detected.

IDENTIFYING USERS & COLLECTING TWEETS

Users to be analysed are identified from the home timeline.
Each user is analysed individually, with only tweets from the current day collected. Tweets prior to midnight are ignored.

GROUPING USERS

Users are assigned to one of five groups based on not only their happiness but the happiness of all users analysed.
These groups are visualised as a sentiment scale ranging from Very Negative to Very Positive.