**Ling 508** 

## Project – Reddit Emoji Frequency Analyzer

A Tool for analyzing emoji frequencies on user specified subreddits.

### **Use Case 1 - Subreddit Emoji Frequencies**

The user specifies a particular subreddit and a particular time range, and then receives emoji frequency information about that subreddit during that time range.

```
Inputs: ("askreddit", (UNIX-TIME-STAMP(January 1, 2020), UNIX-TIME-
STAMP(January 1, 2021) ) )
```

**Outputs:** ( , 5000), ( , 2000), ( , 500), ... *continued ...* 

# **Use Case 2 - Emoji Frequency Comparison** (Subreddits)

### (Combining Multiple Instances of Use Case 1 along different subreddits)

The user specifies two subreddits and a particular time range, and then receives emoji frequency information about that subreddit during that time range for both subreddits, as well as comparison specific information like difference in percentage of overall emoji usage.

```
Inputs: ("askreddit", "mildlyinteresting", (UNIX-TIME-STAMP(January 1, 2020), UNIX-TIME-STAMP(January 1, 2021) ))
```

#### Outputs:

```
["askreddit", ( , 5000, 22%), ( , 2000, 11%), ( , 500, 7%), ... continued ... ],

["mildlyinteresting", ( , 7000, 21%), ( , 3000, 13%), ( , 900, 10%), ... continued ...],
```

["/r/askreddit uses emoji **X% less** than /r/mildlyinteresting"]

An additional detail of this use case:

The user should be able to click any emoji, thus highlighting it on both lists for each subreddit.

# **Use Case 3 - Emoji Frequency Comparison** (Time)

### (Combining Multiple Instances of Use Case 1 along different time ranges)

The user specifies one subreddit, and two different time ranges, and then receives emoji frequency information about that subreddit during that time range for both time ranges, as well as comparison specific information like which emoji fell out of favor or became more frequent in the secondary time range.

```
Inputs: ("askreddit", (UNIX-TIME-STAMP(January 1, 2020), UNIX-TIME-
STAMP(January 1, 2021) ), (UNIX-TIME-STAMP(January 1, 2021), UNIX-TIME-
STAMP(January 1, 2022) )
```

#### **Outputs:**

```
["askreddit", time_range_1 ( , 5000, 22 %), ( , 2000, 11%), ( , 500, 7%), ... continued ... ],

["askreddit", time_range_2 ( , 6000, 23 %), ( , 2500, 15%), ( , 2100, 10%), ... continued ...],

Upon clicking :

["Usage of increased by 1% relative to overall emoji usage."]

Upon clicking :

["Usage of increased by 8% relative to overall emoji usage."]

Upon clicking :

["Usage of decreased by 1% relative to overall emoji usage."]
```