COMP3162 Project 1

620156895 620156898

2025-03-29

Part I a

```
library(wordcloud)
```

```
## Loading required package: RColorBrewer
```

```
library(RColorBrewer)
library(wordcloud2)
library(tm)
```

```
## Loading required package: NLP
```

```
library(syuzhet)
library(SnowballC)
```

```
travel_review.df <- read.csv("traveler_reviews.csv", stringsAsFactors = FALSE)
thailand_review <- travel_review.df[travel_review.df$Country=="Thailand", ]
malaysia_review <- travel_review.df[travel_review.df$Country=="Malaysia", ]
japan_review <- travel_review.df[travel_review.df$Country=="Japan", ]
```

Thailand

```
thailand_corpus <- Corpus(VectorSource(thailand_review$ReviewText))
thailand_corpus <- tm_map(thailand_corpus, content_transformer(tolower))
```

```
## Warning in tm_map.SimpleCorpus(thailand_corpus, content_transformer(tolower)):
## transformation drops documents
```

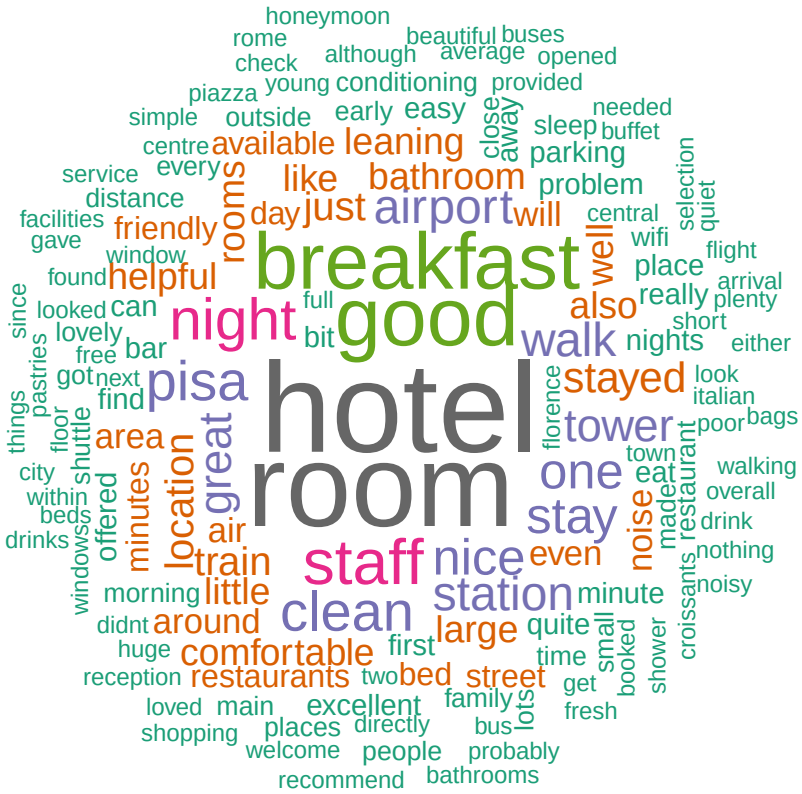
```
thailand_corpus <- tm_map(thailand_corpus, removePunctuation)
```

```
## Warning in tm_map.SimpleCorpus(thailand_corpus, removePunctuation):
## transformation drops documents
```

```
thailand_corpus <- tm_map(thailand_corpus, removeWords, c(stopwords("en"), "bampb", "etc", "amp" ) )
```

```
## Warning in tm_map.SimpleCorpus(thailand_corpus, removeWords, c(stopwords("en"),
## : transformation drops documents
```

```
wordcloud(thailand_corpus, max.words = 150, random.order = FALSE, colors = brewer.pal(8, "Dark2"))
```



Malaysia

```
malaysia_corpus <- Corpus(VectorSource(malaysia_review$ReviewText))
malaysia_corpus <- tm_map(malaysia_corpus, content_transformer(tolower))
```

```
## Warning in tm_map.SimpleCorpus(malaysia_corpus, content_transformer(tolower)):
## transformation drops documents
```

```
malaysia_corpus <- tm_map(malaysia_corpus, removePunctuation)
```

```
## Warning in tm_map.SimpleCorpus(malaysia_corpus, removePunctuation):
## transformation drops documents
```

```
malaysia_corpus <- tm_map(malaysia_corpus, removeWords, c(stopwords("en"), "bampb", "'d", "etc", "amp" )
```

```
## Warning in tm_map.SimpleCorpus(malaysia_corpus, removeWords, c(stopwords("en"),
## : transformation drops documents
```

```
wordcloud(malaysia_corpus, max.words = 150, random.order = FALSE, colors = brewer.pal(8, "Dark2"))
```

Japan

```
japan_corpus <- Corpus(VectorSource(japan_review$ReviewText))
japan_corpus <- tm_map(japan_corpus, content_transformer(tolower))
```

```
## Warning in tm_map.SimpleCorpus(japan_corpus, content_transformer(tolower)):
## transformation drops documents
```

```
japan_corpus <- tm_map(japan_corpus, removePunctuation)
```

```
## Warning in tm_map.SimpleCorpus(japan_corpus, removePunctuation): transformation
## drops documents
```

```
japan_corpus <- tm_map(japan_corpus, removeWords, c(stopwords("en"), "bampb", "etc", "amp" ) )
```

```
## Warning in tm_map.SimpleCorpus(japan_corpus, removeWords, c(stopwords("en"), :
## transformation drops documents
```

```
wordcloud(japan_corpus, max.words = 150, random.order = FALSE, colors = brewer.pal(8, "Dark2"))
```

Similarities: The words “hotel”, “room” and “pisa” were the most common words in all three countries word cloud. The word “tried” was common in Malaysia’s and Japan’s word cloud, the word “fresh” was common in Thailand’s and Japan’s word cloud and the word “one” was common in Malaysia’s and Thailand’s word cloud.

Differences: The word “croissants” was only present in Thailand’s word cloud, the word euro was only present in Malaysia’s word cloud and the word “spacious” was only present in Japan’s word cloud.

Part I b

Thailand Dominant Sentiment

```
thailand_sentiments <- get_nrc_sentiment(thailand_review$ReviewText)
dominant_thailand_sentiment <- names(which.max(colSums(thailand_sentiments)))
print(paste("The dominant sentiment for Thailand is:", dominant_thailand_sentiment))
```

```
## [1] "The dominant sentiment for Thailand is: positive"
```

Malaysia Dominant Sentiment

```
malaysia_sentiments <- get_nrc_sentiment(malaysia_review$ReviewText)
dominant_malaysia_sentiment <- names(which.max(colSums(malaysia_sentiments)))
print(paste("The dominant sentiment for Malaysia is:", dominant_malaysia_sentiment))
```

```
## [1] "The dominant sentiment for Malaysia is: positive"
```

Japan Dominant Sentiment

```
japan_sentiments <- get_nrc_sentiment(japan_review$ReviewText)
dominant_japan_sentiment <- names(which.max(colSums(japan_sentiments)))
print(paste("The dominant sentiment for Japan is:", dominant_japan_sentiment))
```

```
## [1] "The dominant sentiment for Japan is: positive"
```