Week 9 Data Story Submission

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Week 9

What is the topic that you have finalized? (Answer in 1 or 2 sentences)

The topic that I have finalized is about the correlation between the popularity of Spotify songs and the elements of the music.

What are the data sources that you have curated so far? (Answer 1 or 2 sentences).

The data source I have obtained is for free, and originates from the following link: https://www.kaggle.com/datasets/sujaykapadnis/spotify-songs

The data set contains information on the track popularity, danceability of the music, energy of the music and liveliness of the music.

```r
# Data set
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.0     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.0
## v purrr     1.0.2
## -- Conflicts ------------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become error
```

```r
Spotify <- read.csv("spotify_songs.csv")

# First 5 rows of the data set
head(Spotify, 5)
```

```
##                  track_id                                      track_name
## 1 6f807x0ima9a1j3VPbc7VN I Don't Care (with Justin Bieber) - Loud Luxury Remix
## 2 0r7CVbZTWZgbTCYdfa2P31                     Memories - Dillon Francis Remix
## 3 1z1Hg7Vb0AhHDiEmnDE79l                     All the Time - Don Diablo Remix
## 4 75FpbthrwQmzHlBJLuGdC7                     Call You Mine - Keanu Silva Remix
## 5 1e8PAfcKUYoKkxPhrHqw4x                 Someone You Loved - Future Humans Remix
```

```
##          track_artist track_popularity          track_album_id
## 1      Ed Sheeran                66 2oCsODGTsRO98Gh5ZSl2Cx
## 2        Maroon 5                67 63rPSO264uRjW1X5E6cWv6
## 3     Zara Larsson                70 1HoSmj2eLcsrROvE9gThr4
## 4 The Chainsmokers                60 1nqYsOef1yKKuGOVchbsk6
## 5    Lewis Capaldi                69 7m7vv9wlQ4iOLFuJiE2zsQ
##                                      track_album_name
## 1 I Don't Care (with Justin Bieber) [Loud Luxury Remix]
## 2                       Memories (Dillon Francis Remix)
## 3                       All the Time (Don Diablo Remix)
## 4                           Call You Mine - The Remixes
## 5                 Someone You Loved (Future Humans Remix)
##   track_album_release_date playlist_name          playlist_id playlist_genre
## 1               2019-06-14    Pop Remix 37i9dQZF1DXcZDD7cfEKhW            pop
## 2               2019-12-13    Pop Remix 37i9dQZF1DXcZDD7cfEKhW            pop
## 3               2019-07-05    Pop Remix 37i9dQZF1DXcZDD7cfEKhW            pop
## 4               2019-07-19    Pop Remix 37i9dQZF1DXcZDD7cfEKhW            pop
## 5               2019-03-05    Pop Remix 37i9dQZF1DXcZDD7cfEKhW            pop
##   playlist_subgenre danceability energy key loudness mode speechiness
## 1         dance pop        0.748  0.916   6   -2.634    1      0.0583
## 2         dance pop        0.726  0.815  11   -4.969    1      0.0373
## 3         dance pop        0.675  0.931   1   -3.432    0      0.0742
## 4         dance pop        0.718  0.930   7   -3.778    1      0.1020
## 5         dance pop        0.650  0.833   1   -4.672    1      0.0359
##   acousticness instrumentalness liveness valence    tempo duration_ms
## 1       0.1020          0.00e+00   0.0653   0.518 122.036      194754
## 2       0.0724          4.21e-03   0.3570   0.693  99.972      162600
## 3       0.0794          2.33e-05   0.1100   0.613 124.008      176616
## 4       0.0287          9.43e-06   0.2040   0.277 121.956      169093
## 5       0.0803          0.00e+00   0.0833   0.725 123.976      189052
```

Week 10

What is the question that you are going to answer?

Does the popularity of Spotify music and correlation to elements of the music suggest any insightful reflections on how people remember things?

Why is this an important question?

Despite not being able to recall the majority of events in their lives, Dr Timothy Byron and Dr Jadey O'Regan (2022) highlights that many individuals have the ability to remember a song, even if they have not heard it in a long time. This ability to remember a song may be attributed to the catchiness and the tempo of the song which allows the song to remain memorable and popular for a long time once learned. As the popularity of the song is dependent on how memoriable it is to individuals (Byron & O'Regan, 2022), understanding the elements of popular music reflects the essential components that help people to remember things.

Which rows and columns of the dataset will be used to answer this question?

I will use the columns: Track popularity, Playlist Genre, Danceability, Valence, Speechiness, Tempo,

As of submitting this document, I intend to work with the first 50 row from each playlist genre as the data is ordered based on the 6 different playlist genre.

References

Byron, T., & O'Regan, J. (2022). *Hooks in popular music.* NSW, Australia. Springer Nature.