Week 10 Project Submission

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Week 9 Questions:

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

I will be doing an analysis of Taylor Swift's music/albums on Spotify.Specifically, I will be focusing on aspects or her music such as tempo, valence and time signature.

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

I will be using the Taylor Swift dataset from Tidy Tuesday. Specifically the taylor_all_songs dataset.

Week 10 Questions:

(1) What is the question that you are going to answer? (Answer: One sentence that ends with a question mark that could act like the title of your data story),

What is Taylor Swift's music like?

(2) Why is this an important question? (Answer: 3 sentences, each of which has some evidence, e.g., "According to the United Nations. . . " to justify why the question you have chosen is important),

In August 2023, Taylor Swift was the first female artist to reach 100 million monthly listeners. Taylor Swift has a $740 million net worth as of June 2023 (according to Forbes). Analysing the stats of her music will help other musicians to figure out the ingredients in her music to cook up hits just like her.

(3) Which rows and columns of the dataset will be used to answer this question? (Answer: Actual names of the variables in the dataset that you plan to use).

Columns I will use include track_name, danceability, energy, key, loudness, mode, speechiness,acousticness, instrumentalness, liveness, tempo, explicit, key_mode, track_release. All variables are defined as per https://github.com/rfordatascience/tidytuesday/blob/master/data/2023/2023-10-17/readme.md.

As for rows used, I will use every row! However, data will be cleaned in the event of NA data.

Dataset used: taylor_all_songs

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.3     v readr     2.1.4
## v forcats   1.0.0     v stringr   1.5.0
## v ggplot2   3.4.3     v tibble    3.2.1
## v lubridate 1.9.2     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 errors
```

```
install.packages("tidytuesdayR",repos = "http://cran.us.r-project.org")
```

```
## package 'tidytuesdayR' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
##  C:\Users\hengj\AppData\Local\Temp\RtmpoXAxyP\downloaded_packages
```

```
library(tidytuesdayR)

tuesdata <- tidytuesdayR::tt_load('2023-10-17')
```

```
## --- Compiling #TidyTuesday Information for 2023-10-17 ----
## --- There are 3 files available ---
## --- Starting Download ---

##
##  Downloading file 1 of 3: `taylor_album_songs.csv`
##  Downloading file 2 of 3: `taylor_all_songs.csv`
##  Downloading file 3 of 3: `taylor_albums.csv`

## --- Download complete ---
```

```r
taylor_all_songs <- tuesdata$taylor_all_songs


taylor_all_songs
```

```
## # A tibble: 274 x 29
##    album_name   ep    album_release track_number track_name     artist featuring
##    <chr>        <lgl> <date>                <dbl> <chr>          <chr>  <chr>
##  1 Taylor Swift FALSE 2006-10-24                1 Tim McGraw     Taylo~ <NA>
##  2 Taylor Swift FALSE 2006-10-24                2 Picture To Bu~ Taylo~ <NA>
##  3 Taylor Swift FALSE 2006-10-24                3 Teardrops On ~ Taylo~ <NA>
##  4 Taylor Swift FALSE 2006-10-24                4 A Place In Th~ Taylo~ <NA>
##  5 Taylor Swift FALSE 2006-10-24                5 Cold As You    Taylo~ <NA>
##  6 Taylor Swift FALSE 2006-10-24                6 The Outside    Taylo~ <NA>
##  7 Taylor Swift FALSE 2006-10-24                7 Tied Together~ Taylo~ <NA>
##  8 Taylor Swift FALSE 2006-10-24                8 Stay Beautiful Taylo~ <NA>
##  9 Taylor Swift FALSE 2006-10-24                9 Should've Sai~ Taylo~ <NA>
## 10 Taylor Swift FALSE 2006-10-24               10 Mary's Song (~ Taylo~ <NA>
## # i 264 more rows
## # i 22 more variables: bonus_track <lgl>, promotional_release <date>,
## #   single_release <date>, track_release <date>, danceability <dbl>,
## #   energy <dbl>, key <dbl>, loudness <dbl>, mode <dbl>, speechiness <dbl>,
## #   acousticness <dbl>, instrumentalness <dbl>, liveness <dbl>, valence <dbl>,
## #   tempo <dbl>, time_signature <dbl>, duration_ms <dbl>, explicit <lgl>,
## #   key_name <chr>, mode_name <chr>, key_mode <chr>, lyrics <lgl>
```