

## WHAT WE ARE STORING:

```
ADVANCED_STATS_DATA = {  
    "Number of Streams"      : integer,  
    "Number of Minutes"     : float,  
    "Average Percentage"    : float,  
    "Time of Day Breakdown" : [float, float, float],  
    "Tracks"                : TRACK_DICT,  
    "Artists"               : ARTIST_DICT,  
    "Albums"               : ALBUM_DICT,  
    "Yearly"               : YEARLY_DICT  
}  
  
YEARLY_DICT = {  
    "(YEAR 1)"              : YEARLY_DATA,  
    ...  
    "(YEAR N)"              : YEARLY_DATA  
}  
  
YEARLY_DATA = {  
    "Number of Streams"      : integer,  
    "Number of Minutes"     : float,  
    "Average Percentage"    : float,  
    "Time of Day Breakdown" : [float, float, float],  
    "Tracks"                : TRACK_DICT,  
    "Artists"               : ARTIST_DICT,  
    "Albums"               : ALBUM_DICT,  
    "Monthly"              : MONTHLY_DICT  
}
```

# Advanced stats from extended streaming history  
# At least 30 seconds or half the song  
# Total over all songs  
# Avg. (ms played/ms tracklength) over all streams  
# % of time listened in morning, afternoon, and night  
# Track dictionary described below  
# Artist dictionary described below  
# Album dictionary described below  
# Yearly dictionary described below

# Yearly data dictionary described below

# Yearly data dictionary described below

# Advanced stats by year  
# At least 30 seconds or half the song  
# Total over all songs  
# Avg. (ms played/ms tracklength) over all streams  
# % of time listened in morning, afternoon, and night  
# Track dictionary described below  
# Artist dictionary described below  
# Album dictionary described below  
# Monthly dictionary described below

```

MONTHLY_DICT = {
    "JANUARY"          : MONTHLY_DATA,          # Monthly data dictionary described below
    ...
    "DECEMBER"         : MONTHLY_DATA          # Monthly data dictionary described below
}

MONTHLY_DATA = {
    "Number of Streams" : integer,              # Advanced stats by month
    "Number of Minutes" : float,               # At least 30 seconds or half the song
    "Average Percentage" : float,              # Total over all songs
    "Time of Day Breakdown" : [float, float, float], # Avg. (ms played/ms tracklength) over all streams
    "Tracks"            : TRACK_DICT,          # % of time listened in morning, afternoon, and night
    "Artists"           : ARTIST_DICT,         # Track dictionary described below
    "Albums"            : ALBUM_DICT,          # Artist dictionary described below
    "Albums"            : ALBUM_DICT,         # Album dictionary described below
}

TRACK_DICT = {
    "(URI 1)"          : TRACK_DATA,           # Track data dictionary described below
    ...
    "(URI N)"          : TRACK_DATA           # Track data dictionary described below
}

ARTIST_DICT = {
    "(URI 1)"          : ARTIST_DATA,          # Artist data dictionary described below
    ...
    "(URI N)"          : ARTIST_DATA          # Artist data dictionary described below
}

ALBUM_DICT = {
    "(URI 1)"          : ALBUM_DATA,           # Album data dictionary described below
    ...
    "(URI N)"          : ALBUM_DATA           # Album data dictionary described below
}

```

**Note: all track and albums data are dependent on what dictionary they are in. For example, the “Number of Streams” key in TRACK\_DATA will have the number of streams of that track by the user for the year of 2022 if this dictionary was found at the following:**

```
ADVANCED_STATS_DATA[“Yearly”][“2022”][“Tracks”][“(URI)”]
```

**Likewise, it will have the number of streams of that track by the user for the month January of 2022 if this dictionary was found at the following:**

```
ADVANCED_STATS_DATA[“Yearly”][“2022”][“Monthly”][“January”][“Tracks”][“(URI)”]
```

```
TRACK_DATA = {
```

“Name”	: String	# Name of song or podcast in format “(show):(ep)”
“Number of Streams”	: integer,	# 30 secs (30 mins for podcasts) or half song/podcast
“Number of Minutes”	: float,	# Total over time period
“Average Percentage”	: float,	# Avg. (ms played/ms tracklength) over song streams
“Skips”	: integer,	# Number of skips

```
}
```

```
ARTIST_DATA = {
```

“Name”	: String,	# Name of artist
“Number of Streams”	: integer,	# At least 30 seconds or half the song
“Number of Minutes”	: float,	# Total over all songs in album
“Average Percentage”	: float	# Avg. (ms played/ms tracklength) over songs

```
}
```

```
ALBUM_DATA = {
```

“Name”	: String,	# Name of album
“Number of Streams”	: integer,	# At least 30 seconds or half the song
“Number of Minutes”	: float,	# Total over all songs in album
“Average Percentage”	: float	# Avg. (ms played/ms tracklength) over songs

```
}
```