**SPOTIFY ANALYSIS**

 spotify**\_track\_uri**

* **Description:** A unique identifier assigned to each track in Spotify’s database.
* **Format:** "spotify:track:<base-62 string>" (e.g., spotify:track:3n3Ppam7vgaVa1iaRUc9Lp).
* **Purpose:** Helps link tracks to their metadata and allows for cross-referencing with Spotify’s catalog.

 ts **(Timestamp)**

* **Description:** The exact time (in UTC) when the track stopped playing.
* **Format:** ISO 8601 format (e.g., 2024-02-07T14:30:45Z).
* **Purpose:** Used for analyzing listening patterns, session durations, and track end times.

 platform

* **Description:** The device or platform used to stream the track.
* **Possible Values:**
  + "desktop" (Windows/Mac app)
  + "mobile" (iOS/Android app)
  + "web" (Spotify Web Player)
  + "smart\_speaker" (Amazon Echo, Google Home, etc.)
* **Purpose:** Helps understand where users are consuming music.

 ms**\_played**

* **Description:** The total number of milliseconds the track was played before stopping or skipping.
* **Format:** Integer value (e.g., 215000 for 3 minutes 35 seconds).
* **Purpose:** Useful for engagement analysis, identifying completed plays, and calculating revenue (as Spotify pays artists based on streaming duration).

 track**\_name**

* **Description:** The title of the song being played.
* **Example:** "Shape of You"
* **Purpose:** Helps in analyzing the most played tracks.

 artist**\_name**

* **Description:** The name of the artist performing the song.
* **Example:** "Ed Sheeran"
* **Purpose:** Useful for ranking popular artists and identifying user preferences.

 album**\_name**

* **Description:** The name of the album the track belongs to.
* **Example:** "÷ (Divide)"
* **Purpose:** Helps analyze album popularity and user listening trends.

 reason**\_start**

* **Description:** The reason why the track started playing.
* **Possible Values:**
  + "trackdone" (Previous track ended)
  + "clickrow" (User manually selected the song)
  + "backbtn" (User pressed back)
  + "fwdbtn" (User pressed next)
  + "playbtn" (User pressed play)
  + "autoplay" (Spotify automatically selected the next track)
* **Purpose:** Helps understand user behavior and track engagement patterns.

 reason**\_end**

* **Description:** The reason why the track stopped playing.
* **Possible Values:**
  + "trackdone" (Track finished playing)
  + "endplay" (User paused or stopped playback)
  + "fwdbtn" (User skipped to the next track)
  + "backbtn" (User went back to the previous track)
  + "logout" (User logged out or session ended)
* **Purpose:** Helps identify why users stop listening to tracks, which is crucial for retention analysis.

 shuffle

* **Description:** Indicates whether shuffle mode was enabled during playback.
* **Possible Values:**
  + TRUE (Shuffle mode was ON)
  + FALSE (Shuffle mode was OFF)
* **Purpose:** Helps analyze how often users use shuffle mode in their listening sessions.

 skipped

* **Description:** Indicates whether the user skipped the song before it finished.
* **Possible Values:**
  + TRUE (User skipped to the next track)
  + FALSE (User did not skip)
* **Purpose:** Important for understanding user engagement, drop-off rates, and song popularity.