

# SPOTIFY ANALYSIS

## Domain Document

- **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:3n3Ppam7vgaValiaRUc9Lp`).
- **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.