

| Field Definitions   |           |  |
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| Field Name          | Data Type | Description  |
| <b>valence</b>      | float64   | Musical positiveness conveyed by a track. Ranges from 0.0 to 1.0. High valence tracks sound more positive (happy, cheerful, euphoric), while low valence tracks sound more negative (sad, depressed, angry). |
| <b>year</b>         | int64     | The year the track was released. Represents the original release year of the recording.  |
| <b>acousticness</b> | float64   | Confidence measure of whether the track is acoustic. Ranges from 0.0 to 1.0, with 1.0 representing high confidence that the track is acoustic (minimal electronic instrumentation).                          |
| <b>artists</b>      | string    | Artist(s) who performed or created the track. May contain multiple artists separated by delimiters if the track is a collaboration.  |
| <b>danceability</b> | float64   | A measure ranges from 0.0 to 1.0 indicates how suitable a track is for dancing based on a combination of musical elements .  |
| <b>energy</b>       | float64   | A measure ranges from 0.0 to 1.0 indicates intensity and activity in a track. Energy is influenced by factors such as loudness, dynamic range, tempo, and timbre.  |
| <b>explicit</b>     | int64     | Explicit content indicator. Binary flag where 1 indicates the track contains explicit content (profanity, violence, etc.) and 0 indicates clean content.   |
| <b>id</b>           | string    | Unique identifier for each track. Used as the primary key to distinguish individual songs in the dataset.  |

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| <b>instrumentalness</b> | float64        | Predicts whether a track contains no vocals. Ranges from 0.0 to 1.0. Values above 0.5 represent instrumental tracks. The closer to 1.0, the greater likelihood the track contains no vocal content. Rap or spoken word tracks are clearly "vocal". |
| <b>Key</b>              | int64          | The musical key of the track, represented as an integer using pitch class notation. Values range from 0 to 11  |
| <b>liveness</b>         | float64        | Detects the presence of an audience in the recording. Ranges from 0.0 to 1.0. Higher values represent an increased probability that the track was performed live. Values above 0.8 strongly suggest the track is live.                             |
| <b>loudness</b>         | int64          | The overall loudness of a track measured in decibels (dB). Typical values range from -60 dB to 0 dB, where values closer to 0 indicate louder tracks.  |
| <b>mode</b>             | int64          | Musical mode (major or minor) of the track. Binary value where 1 represents major scale and 0 represents minor scale. Indicates the type of scale from which the melodic content is derived.   |
| <b>name</b>             | string         | The title of the track. Contains the official name of the song as it appears in the music catalog.   |
| <b>popularity</b>       | float64        | Popularity score of the track. Typically ranges from 0-100, with higher values indicating more popular tracks based on streaming data and user engagement.   |
| <b>release_date</b>     | datetime64[ns] | Complete release date of the track including day, month, and year. Provides precise temporal information about when the track became available.  |

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| <b>speechiness</b>  | <code>float64</code> | Detects the presence of spoken words in a track. Ranges from 0.0 to 1.0. Values above 0.66 indicate tracks made primarily of spoken words (podcasts, audiobooks). Values between 0.33-0.66 may contain both music and speech (rap music). Values below 0.33 represent music and non-speech tracks. |
| <b>tempo</b>        | <code>string</code>  | Estimated tempo of the track in beats per minute (BPM). Stored as string but represents the overall pace or speed of the recording. Typical values range from 50-200 BPM.  |
| <b>Genre</b>        | <code>string</code>  | Musical genre classification of the track. Categories may include pop, rock, hip-hop, electronic, classical, jazz, etc.  |
| <b>duration_min</b> | <code>float64</code> | Duration of the track in minutes. Represents the total length of the audio recording as a decimal value (e.g., 3.5 = 3 minutes 30 seconds).  |