

247Music Data Dictionary

The 247Music database consists of 6 tables. Each table is described below. A description of how to connect to the database is given at the end of this document.

Table Name: *track*

This table provides details about songs (tracks), the recording artist (artist) and the album on which the song was released. Your database credentials will only have **Select** privileges for this table.

| Column | Type | Null | Default | Comments |
|---------------|--------------|------|---------|--|
| track_id | int | No | | This is an auto incrementing number to uniquely identify a table row. It is the unique song identification number. |
| track_title | varchar(200) | No | | Song title |
| artist_id | int | No | | Recording artist id |
| track_length | varchar(6) | Yes | NULL | Playing length of the song in minutes and seconds (eg, 2:52) |
| spotify_track | varchar(40) | Yes | NULL | Track identifier on Spotify (for play a short preview clip) |
| album_id | int | No | | unique album identification number |

Table Name: *artist*

This table provides details about the recording artist (artist). Your database credentials will only have **Select** privileges for this table.

| Column | Type | Null | Default | Comments |
|-------------|--------------|------|---------|---|
| artist_id | int | No | | This is an auto incrementing number to uniquely identify a table row. It is the unique artist identification number |
| artist_name | varchar(200) | No | | Recording artist name |
| thumbnail | varchar(200) | Yes | Null | Filename of thumbnail image for the artist |

Table Name: *album*

This table provides details about music albums. Your database credentials will only have **Select** privileges for this table.

| Column | Type | Null | Default | Comments |
|------------|--------------|------|---------|--|
| album_id | int | No | | This is an auto incrementing number to uniquely identify a table row. It is the unique album identification number |
| album_name | varchar(200) | No | | Album name |
| album_date | year | Yes | Null | Year of release of album |
| thumbnail | varchar(200) | Yes | Null | Filename of thumbnail image for the album |
| artist_id | int | No | | unique artist identification number |

Table Name: *membership*

This table provides details about members (subscribers) of 24/7Music. It provides their personal information, and login credentials (username and password). Your TWA student database credentials will only have **Select** privileges for this table.

Note: passwords are encrypted using the **sha256** algorithm. For testing purposes, the plain text passwords are given in the **Member Login Credentials** document.

| Column | Type | Null | Default | Comments |
|-----------|--------------|------|---------|---|
| member_id | int | No | | This is an auto incrementing number to uniquely identify a table row. It is the unique member id |
| username | varchar(100) | No | | member username. This is used by the member to login to the web application |
| surname | varchar(50) | No | | member surname |
| firstname | varchar(50) | No | | member first name |
| password | varchar(300) | No | | member password. This is used for authentication in combination with the username. The value stored in this field is encrypted using the sha256 algorithm. See above note . |
| category | varchar(10) | No | | The type of membership held by the member. Possible values are Free, Premium, Family |

Table Name: *memberPlaylist*

This table provides details about Playlists that have been created by members. A member may have zero or many playlists. Your TWA student database credentials will have **Select** and **Insert** privileges for this table.

| Column | Type | Null | Default | Comments |
|---------------|-------------|------|---------|---|
| playlist_id | int | No | | This is an auto incrementing number to uniquely identify a table row. You do not insert this number into the database it is determined automatically. It is the unique playlist identification. |
| member_id | int | No | | member username. |
| playlist_name | varchar(30) | No | | Name of the playlist supplied by the member |

Table Name: *playlist*

This table identifies the tracks for each playlist. A playlist may have zero or many tracks. Your TWA student database credentials will have **Select** and **Insert** privileges for this table.

| Column | Type | Null | Default | Comments |
|-------------|------|------|---------|---|
| id | int | No | | This is an auto incrementing number to uniquely identify a table row. You do not insert this number into the database it is determined automatically. |
| playlist_id | int | No | | unique playlist identification number. |
| track_id | int | No | | unique song identification number. |

Connecting to the 247Music Database

To connect to the **247Music** database use the following in your php script

```
$dbConn = new mysqli("localhost", "TWA_student", "TWA_2020_Autumn", "247Music");
if($dbConn->connect_error) {
    die("Failed to connect to database " . $dbConn->connect_error);
}
```

Note

The tables within the **247Music** database have already been populated with some data. Use the supplied `allTables.php` script to view the data (make sure you use the connection information as indicated above).