# 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).