# Music Inventory Database Documentation

The Music Inventory database is a simplified version of a database that might be used by a small retailer. The tables track compact disc (CD) inventory along with information to support searching the inventory, including recording labels, artists, and types of music. The tables are populated with a relatively small number of sample data rows.

The database tables are as follows:

**CD\_LABELS:** contains a row for each label (brand name) used by a music publisher (e.g. Columbia, RCA)

**MUSIC\_TYPES:** contains a row for each type (category) of music that the retailer uses to classify music (e.g. Alternative Rock, Jazz, Pop).

**ARTISTS:** contains a row for each composer or music artist who can be credited on one or more recordings.

**COMPACT\_DISCS:** contains a row for each compact disc title that the retailer stocks.

**COMPACT\_DISC\_TYPES**: intersection table that links compact discs and music types. Each compact disc can have multiple types, and each type can be associated with multiple compact discs.

**ARTIST\_CDS:** intersection table that links compact discs and artists. Each compact disc can have multiple artists, and each artist can be associated with multiple compact discs.

In addition to the tables, there are two views defined in the database. These won’t be used in Module 2, but will be used at a later time. The views are:

**CD\_PUBLISHERS:** Selects publisher names (COMPANY\_NAME from CD\_LABELS) and the CD\_TITLE (obtained through a join with the COMPACT\_DISCS table.

**CDS\_IN\_STOCK:** Selects the CD\_TITLE and IN\_STOCK (current inventory) columns from the COMPACT\_DISCS table for any CDs that have more than 10 copies in stock.

The following table documents all the table columns.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table** | **Column** | **Description** | **Data Type** | **Mandatory?** |
| CD\_LABELS | LABEL\_ID | Unique identifier for the label; Primary Key. | INTEGER | Yes |
|  | COMPANY\_NAME | Text name for the music publisher | VARCHAR(60) | Yes |
| MUSIC\_TYPES | MUSIC\_TYPE\_ID | Unique identifier for the music type; Primary Key | INTEGER | Yes |
|  | MUSIC\_TYPE\_NAME | Text name for the music type (e.g. Alternative Rock, Blues) | VARCHAR(20) | Yes |
| ARTISTS | ARTIST\_ID | Unique identifier for the artist; Primary Key | INTEGER | Yes |
|  | ARTIST\_NAME | Text full name for the artist | VARCHAR(60) | Yes |
|  | PLACE\_OF\_BIRTH | Text name of the artist’s place of birth; defaults to ‘Unknown’ | VARCHAR(60) | Yes |
| COMPACT\_DISCS | CD\_ID | Unique identifier for the CD; Primary Key | INTEGER | Yes |
|  | CD\_TITLE | The title of the album (CD) | VARCHAR(60) | Yes |
|  | LABEL\_ID | Unique identifier for the label; Foreign Key to CD\_LABELS table. | INTEGER | Yes |
|  | COPYRIGHT\_YEAR | The year the CD was copyrighted. | INTEGER | Yes |
|  | IN\_STOCK | The number of units of inventory currently in stock. | INTEGER | Yes |
| COMPACT\_DISC\_TYPES | CD\_ID | Unique identifier for the CD; Primary Key component 1 of 2; Foreign Key to CD\_COMPACT\_DISCS | INTEGER | Yes |
|  | MUSIC\_TYPE\_ID | Unique identifier for the music type; Primary key component 2 of 2; Foreign Key to MUSIC\_TYPES | INTEGER | Yes |
| ARTIST\_CDS | ARTIST\_ID | Unique identifier for the artist; Primary Key component 1 of 2; Foreign key to ARTISTS | INTEGER | Yes |
|  | CD\_ID | Unique identifier for the CD; Primary Key component 2 of 2; Foreign Key to CD\_COMPACT\_DISCS | INTEGER | Yes |

Here is the physical data model for the Music Inventory Database:

