

# Music Resale Shop System

Keeping track of many branches of a business is difficult and can be helped with a clever system. This system aims to assist in the management of several music resale shop locations. The goal is to provide insight on the finances of each branch and which types of albums are most popular there.

## Data Description:

1. Album
  - a. Album ID
  - b. Title
  - c. Artist(s): Artist that contributes to the album; the first ones listed is the main artist and the second is the featured artist.
  - d. Type: Vinyl, CD or Cassette
  - e. Year of release
  - f. Genre (Rock, folk, metal, etc.)
  - g. Price
2. Employee
  - a. Employee ID
  - b. Type: Standard employee or store manager
    - i. Store managers are paid salary
    - ii. There is only one store manager
    - iii. Clerks are paid hourly
    - iv. Number of hours worked per week is captured
3. Customer: Supplier
  - a. Customer ID
  - b. Name
  - c. Contact information
    - i. Address
    - ii. Email
    - iii. Phone Number
4. Customer: Individual
  - a. Customer ID
  - b. Name
  - c. Contact information
    - i. Address
    - ii. Email
    - iii. Phone Number
  - d. Favorite Genre
5. Sale Record
  - a. Transaction ID
  - b. Customer ID
  - c. Title(s) of album sold
    - i. Quantity sold
  - d. Price it was sold at

- e. Date of transaction
- 6. Purchase Record
  - a. Transaction ID
  - b. Supplier or Customer ID
  - c. Title(s) of album bought
    - i. Quantity bought
  - d. Price it was bought for
  - e. Date of transaction
- 7. Store
  - a. Store ID
  - b. Store address
  - c. Store hours of operation
  - d. Employees
  - e. Inventory (all albums on the shelves)
  - f. Transaction records

**Assumptions:**

- ❖ There will be 5 stores managed by the system.

**Functionalities:**

1. The System shall generate reports comparing spending and revenue of the company or individual stores.
  - 1.1. Can be done monthly, quarterly or yearly.
2. The System shall generate reports showing sales performance of certain categories of albums.
  - 2.1. Can be categorized based on genre, type (Vinyl, CD or cassette), artist or decade of release.
  - 2.2. This information will be used to dictate the movement of inventory from store to another to respond to greater demand for certain types of albums.
  - 2.3. This data can be found for a single store or the entire company.
3. The System shall generate reports including sales performance of their store alongside a schedule showing which employees worked during that time.
4. The System shall generate reports showing the transaction records of individual stores to measure which parts of the day customers come in.
5. The System shall generate reports of albums regarding the average amount of time the album stays on the shelf before being sold.
  - 5.1. This will be used to determine if the price of the album should be raised or lowered.
  - 5.2. This value will be determined by the system calculating the difference between the date of purchase and the date of sale (or the current date if it has not sold).
6. The System shall generate reports comparing sales records of albums purchased from a supplier compared to the cost of purchasing them from that supplier.

7. The System shall generate reports showing the business history with customers (individuals and suppliers).
8. The System shall generate reports showing a ranking of favorite genres of individual customers.
  - 8.1. The favorite genre of each customer will be determined by the most common genre of albums that they purchase from any store.