

Music Management Software

Objective

Music Library Management System have to manage various musical items comes with number of models and variety. Maintaining all musical records such as create order, calculate bill, add new music in database, edit the music description, and delete any item from large music library was not an easy task on regular basis.

This is a music store manager program in C++ with that can create order, calculate bill, add new music in database, edit the music description, and delete any item also it shows the total music in stock, and it can find the specific music.

❖ **Function ShowAllItems()**

Shows all the item in the database. Assign result in qstate Finally show the result in the console of all rows in the database. Lastly, Exit code run for go to main function or exit.

❖ **function AddNewItemInDatabase()**

Add new item in the database

Firstly, gets the input of Category, Type, Name, Artist, Price, Quantity from the database

Stringstream function can copy the non-string variable to a string variable.

The insert query stored in the insert *queryvariable<tr() converts the string to constant character. The MySQL query function can only deal with the constant character.*

Qstate gets the state of the query.

Finally, the Exit Code terminates the program or go to main function or repeat the same function.

❖ **Function ItemInStock()**

- Show all the item in stock
- This is same as ShowAllItems() function but this only show that items quantity is more than zero.
- Lastly, Exit Code run for go to main function or exit.

❖ **Function FindMusic()**

- Find items from database
- Four ways to find items Name, Type, Artist, Category
- From the choose of one item from the list the user can search that particular item.
- The program is smart so if the user type one word then it can find the result with that word.
- Finally the Exit Code terminates the program or go to main function or repeat the same function.

❖ **Function EditItem()**

- User can edit any item
- Firstly all the items name and ids are displayed in the console.
- Than the user can choose only one item and can edit the item.
- The user can change the item property or remain the item property same.
- Finally the Exit Code terminates the program or go to main function or repeat the same function.

❖ **Function CreateOrder()**

- User can create an order.
- Firstly, the mysql query select all the items from the database and display in the console if the item quantity is more than zero. It also store the items in an array.
- Now the user can type the ID of the song.
- The user can type same id of the song.
- It also checks the id validity.
- Now the program shows the list of the items
- After that the program can edit the list item by removing items from the list or buy the items.
- When the program goes to buy function then two loops are executing.
- There is a 'If' statement, that check is the given value is matching with the id of songs.
- Then a mysql query is get the current quantity of the item in the database.

- totalprice add the price of the items which are bought by the user.
- Then the quantity calculation, in every purchase the quantity reduces of the respective item.
- The update mysql query update the last calculated item quantity in the database.
- Finally, the result message and the total price pops up in the console.
- Then the Exit Code executes.

❖ **Function SoldItems()**

- The sold item shows the item all the items that sold and how many of them are sold with its all property.
- Then the Exit Code runs.

❖ **Conclusion**

Project is useful for the music lovers and the store owners to carry out their daily work of selling, restocking albums in store with much ease using object-oriented programming.

❖ **Result**

Through this project, we have learned the essence of oops, namely: Abstraction, Encapsulation, Inheritance, Polymorphism. We learned several ways to use classes, objects and well-defined functions using operator overloading, friend function etc.

