CMPT 304 – Assignment Five

Due: Tuesday, April 12th, 2022 @ 11pm

Create a web application using HTML, JavaScript, PHP, and MySQL (in addition CSS and especially jQuery might be helpful!) to create two PHP web pages for the fictional company Music Depot to manage their database of records (i.e., albums).

1. The first allows a user to search through Music Depot's database of records with various search criteria. (Search Page)
2. The second allows a user to enter new records into Music Depot's database. (Insert Page)

Contents

musicdepot database

Before you create these webpages, you should create a database called `musicdepot` and create a table in this database called `records` using MySQL from the command line. `records` should have four columns as follows (in this order):

1. `Name`
2. `Artist`
3. `Year`
4. `Price`

where `Name` is the name of the record (char(100)), `Artist` is the name of the artist or band who released the album (char(100)), `Year` is the release year of the album (int(4) unsigned), and `Price` is the price of the album (decimal(5,2)). Since records do not have a distinguishing number like ISBN for books, we will make the primary key a composite of both Name and Artist to distinguish between records (this works under the assumption that the same band will not release two records with the same name). To set the primary key as this, execute the following command after the database and table are created:

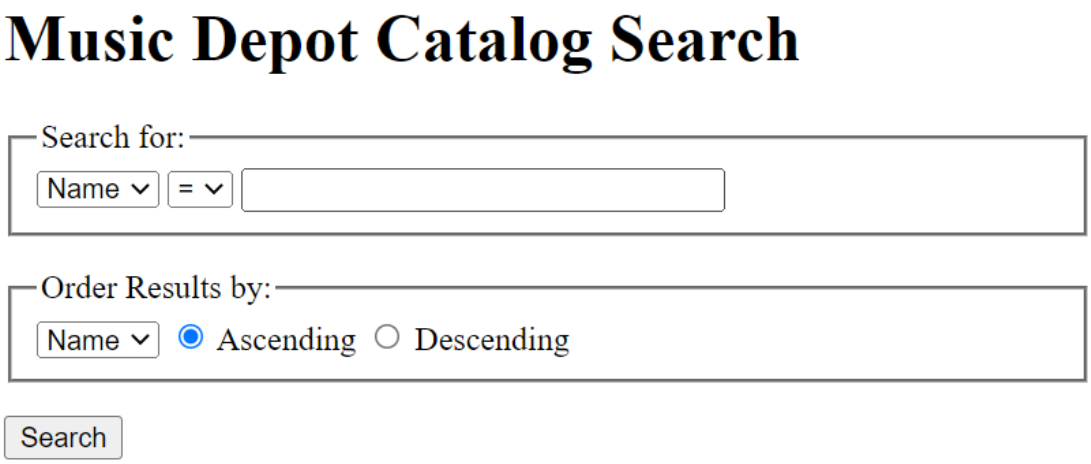
```
alter table records add primary key (Name, Artist);
```

Your program will be tested with a database with these criteria so please design it exactly as specified.

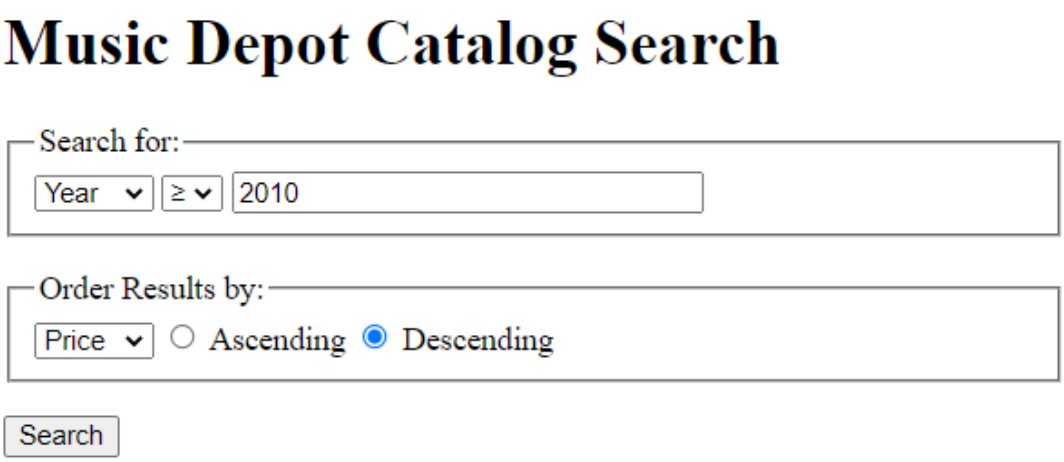
Search Page

Your Search Page should be a form with several fields for the user to specify their search terms and the order they want the results to be displayed. The search term is a text input that should follow two dropdown menus. The first dropdown menu with the options Name, Artist, Year, and Price and the second with the options =, <, ≤, >, and ≥ (more on this one after the screenshots). What ever these fields are set to, your script should query the MySQL database for the results. For example, if the user selects Price in the first, > in the second and inputs 10.00 in the third, you should return a list of all records that cost more than $10. Before you show the results, you should summarize what the results are for, i.e. echo a line like "Showing all results from the Music Depot Catalogue where Year >= 2010". In addition to the search results, the user should also be able to choose how the results are displayed, so there should be two more fields for user input. One another dropdown menu with the same options as the first dropdown menu (Name, Artist, Year, and Price) and the radio buttons, one to sort the results in ascending order and the other in descending order. See the following screen shots

The following is what the body of your Search Page should like when it is first loaded.



After the search in the below screen shot is entered



Your Search Page should display the results as follows (I have entered some records for the example, but yours will likely be different, so the main point is that only the records released on or after 2010 are displayed and in descending order of price):

Music Depot Catalog Search

Search for:

Name =

Order Results by:

Name Ascending Descending

Search

Results

Showing all results from the Music Depot Catologue where Year >= 2010.

Number of records found: 4

Name: Bon Iver
Arist: Bon Iver
Year: 2011
Price: $21.86

Name: Peace
Arist: Demon Hunter
Year: 2019
Price: $15.10

Name: Yeezus
Arist: Kanye West
Year: 2013
Price: $10.00

Name: Songs of Innocence
Arist: U2
Year: 2014
Price: $0.00

If the user submits the form with nothing in the text box, then you should display the entire Music Depot catalogue ordered by whatever is specified in the “Order Results by:” field. See following screenshot where the results are ordered by ascending Year.

Music Depot Catalog Search

Search for:
Name =

Order Results by:
Name Ascending Descending

Search

Results

Showing Music Depot's entire catolague.

Number of records found: 7

Name: Nebraska
Arist: Bruce Springsteen
Year: 1984
Price: $16.67

Name: Californication
Arist: Red Hot Chili Peppers
Year: 1999
Price: $46.88

Name: By the Way
Arist: Red Hot Chili Peppers
Year: 2002
Price: $25.99

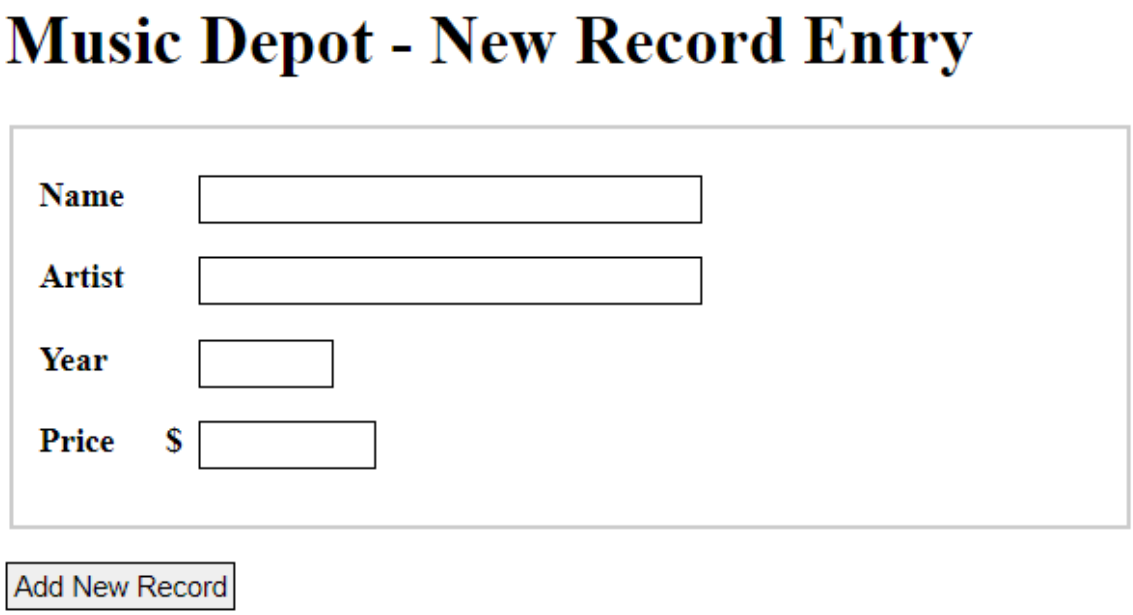
Name: Bon Iver
Arist: Bon Iver
Year: 2011
Price: $21.86

Name: Yeezus
Arist: Kanye West
Year: 2013
Price: $10.00

In addition, you should also use JavaScript (I found jQuery very helpful here too!) to make sure that the second dropdown menu in the "Search For:" field only displays the option "=" when the first dropdown menu in the "Search for:" field is set to Name or Artist (since it is not as intuitive to sort by, e.g., > or < when it is a string!). Hint: the 'change' event of your select element should be helpful here, as would the jQuery hide and show methods!

Insert Page

Your Insert Page should be a simple form that allows the user to enter all of the information associated with a record to insert a new record into Music Depot's database. See the screenshot below.



The record should **only be added to the database if the user fills in each field** of the form! If the record is successfully added to the database, you should display a short message to the user letting them know this (see the below screen shot).

Music Depot - New Record Entry

Name

Artist

Year

Price $

Add New Record

The record "Nebraska" was inserted into the database.

Otherwise, display a generic error message to let the user know something went wrong and the record was not actually added (like the following screenshot). Note that because of how we defined the primary key for our table, we should not be able to add duplicate entries, so you may want to test this here.

Music Depot - New Record Entry

Name

Artist

Year

Price $

Add New Record

An error has occurred.
The item was not added.

Submission instructions

You must submit your two php webpages (the search page and insert page) along with a plain text file that includes the MySQL command line commands you used to create your database. **You do not have to include your actual database files**. As usual, zip these three files (or create a .tar.gz archive) and upload it to Moodle.