Table of Contents

Part 1: Design 2	
Project Narrative 2	
<u>Data Dictionary</u> 2-3	
Data_Questions 3-4	
Entity Relationship Diagram 4	
Logical Model Diagram 5	
Normalized Model 5	
Part 2: Implementation 6	
SQL DDL 6	
SQL DML 7	
INSERT Statements 8	
Artist Table 8	
Website Table 8-9	
Product Table 9-10	
Performance Table 10	
MusicTitle Table 11	
MusicSales Table 11	
Data Manipulation statements 12	
Answers to Data Questions (SQL SELECT Statements)	13-19
GUI Prototype 20-23	
Reflection 23	

Part 1: Design

Project Narrative

Milk Boys Art House is a new, small concert hall, art gallery, and mini-store located right behind the University of Maryland's main campus. Within its first year of opening, the Art House has hosted a number of bands. Andrew, the owner of the venue is a designer who sells custom-made Headbands, Posters, and T-shirts of the Art House's mini store wants to streamline the planning of booking a solo musician by making it more efficient so he can focus on designing merchandise and running the venue. He has joined a deal with a few record labels that allows him to book solo artists from bands for a set price for the year 2019. Andrew hopes to create a database that makes the Musician Booking process more efficient. By creating a database that can show him all the artists he can book, the cost of booking them for a performance, the type of performer they are, where the artist is located. Additionally, he wants the database linked to a website called myrausic come that will permitte the artists because page contact information.

weosite cancu mymusic.com that will populate the artists banner page, contact information, image, and biography. He also wants to know which artists have posters and other merchandise he can buy and sell in his mini-store, alongside his own products. Overall, Andrew wants to see information pertaining to specific musicians in order to plan the atmosphere of the Art House for that event in order to make their performance more of an experience to attendees.

Data Dictionary

Working with Andrew, we have compiled a following list of entities and attributes he seeks in his database.

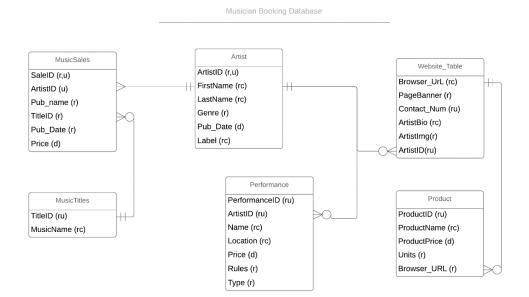
Entity	Attribute	Properties
Artist	ArtistID	Required. Unique
	FirstName	Required.
	LastName	Required
	Genre	Required. From list of music genres
	Label	Required.
Website	Browser_URL	Required. Unique
	ArtistID	Required.
	PageBanner	Updated from website.
	Contact_Num	Required.
	ArtistBio	Required.Updated from website
	ArtistImg	Updated from website
Product	ProductID	Unique. Required
	ProductName	Required
	ProductPrice	Required. Price for single product
	Units	Required. Sum of units available of product
	Browser_Url	Required.
Performance	PerformanceID	Required. Unique
	ArtistID	Required
	Name	Required. Name of the artists tour or performance
	Location	Required
	Price	Required. Price of single performance
	Rules	Required.Rules of hosting said artist compiled.
	TYPE	Compilation of the type of performance given by single artist.
MusicTitles	TitleID	Unique. Required
	MusicName	Required. Single sample of artitsts song,
Music Sales	SaleID	Required.Unique
	ArtistID	Required
	Pub_Name	Derived from a list of used music publisherrs
	TitleID	Unique. Required
	Price	Required. Sum of music sales for said artist
	Pub_Date	Date of musics released

Data Questions

- 1. What are the artists available to book, what is their musical genres, current location, and price per performance?
- 2. What artists have posters Milk Boy Art House can buy and sell? What is the quantity available, price per poster, and URL to the poster's link.
- 3. What are the music sales of artists, and the date they published their songs. Also wish to include their label's name and genre

- merade men raber 5 mante and genre.
- 4. List of available performances ordered by the price of said performance and the type of performance given by artist.
- 5. List of songs with the artist and its published date.
- 6. What music sales are are over \$1,000
- 7. Who are the artists with publicans released between 1/1/2001 and 12/31/2005
- 8. What are the average prices of the products sold.
- 9. Who are the artist who have never performed.
- 10. What is the contact information and bio for artist with products available.
- 11. What are the products with musician information and website URL
- 12. Who are the artist who have higher than average music sales. With their contact information and their records company
- 13. What artists don't have an album listed in the music sales table?
- 14. What is the URL of the artists who are not able to perform this year?

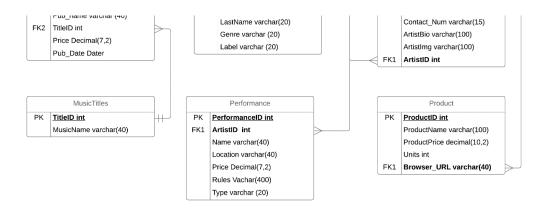
Entity Relationship Diagram



Logical Model Diagram



Musician Booking Database



Normalized Model

The logical model above was able to be normalized in at least the third normal form, therefore, no additional normalization is needed.

Part 2: Implementation

SQL DDL

```
--Create table artist
create table artist
         ArtistID int identity,
         FirstName VARCHAR (20) not null,
         LastName VARCHAR (20) not null,
         Genre VARCHAR (20) not null,
         Label VARCHAR (20) not null,
         -- Create constraint on table artist
         constraint PK_artist PRIMARY KEY(ArtistID)
-- End creating table for artist
-- Create table for website
create table website_table
Browser_URL VARCHAR(40),
PageBanner VARCHAR (25),
Contact_Num VARCHAR(15),
ArtistBio VARCHAR(100),
ArtistImg VARCHAR(15),
ArtistID int NOT NULL,
         -- Create constraint on table artist
constraint\ PK\_BrowserURL\ primary\ key(Browser\_URL),
constraint FKArtistID foreign key (ArtistID) references artist(ArtistID)
```

```
--end creating table for website
--create table for product
create table Product
         ProductID int identity,
         ProductName\ {\color{red}VARCHAR}(100),
         ProductPrice DECIMAL(10,2),
         Units int,
         Browser_URL VARCHAR(40) NOT NULL,
--Create Constraints on table product
         constraint PK_Product primary key(ProductID),
         constraint FK1_Product foreign key (Browser_URL) references website_table(Browser_URL)
--end creating table for product
-- Create Table for Performances
create table Performances
          PerformanceID int identity,
          ArtistID int NOT NULL,
         Name VARCHAR(40),
          Location VARCHAR(40),
         Price DECIMAL(7,2),
         Rules VARCHAR(400),
          -- Create contraints for table performances
          constraint PK_Performances primary key(PerformanceID),
          constraint FKPerformerID foreign key (ArtistID) references artist(ArtistID)
-- End Creating table performance
-- Create table MusicTitles
create table MusicTitles
         TitleID int identity,
         MusicName VARCHAR(40),
         -- Create constraints for table musictitles
         constraint PK_MusicTitles primary key(TitleID)
);
-- End creating table Music Titles
-- Create table Musicsales
create table MusicSales
         SaleID int identity,
          ArtistID int NOT NULL,
         Pub_Name VARCHAR(40),
         TitleID int NOT NULL,
         Price DECIMAL(7,2),
         Pub_Date DATE,
         --create constraints music sales
         constraint PK_MusicSales primary key(SaleID),
          constraint EV1 Music Color foreign Law (ArtistID) references artist/ArtistID)
```

```
constraint FK1_MusicSales foreign key (ArusuD) references arusu(ArusuD), constraint FK2_MusicSales foreign key (TitleID) references MusicTitles(TitleID));
```

SQL DML

--end creating Music Sales

```
--Alter performances table column name (due to error in initital entry/execution)
alter table dbo.Performances
          ADD TYPE varchar(20);
--Insert data---
--insert data into Artist table--
insert into artist (FirstName LastName Genre Label) values ('Billy', 'Power', 'Punk', 'Tooth & Nail Records');
insert into artist (FirstName LastName Genre Label) values ('Ed', 'Power', 'Punk', 'Tooth & Nail Records');
insert into artist (FirstName,LastName,Genre,Label) values ('Stephen','Keech','Metalcore','Solid State');
insert into artist (FirstName,LastName,Genre,Label) values ('Jimmy','Ryan','Christian metal','Solid State');
insert into artist (FirstName,LastName,Genre,Label) values ('Nicholas','Moore','Post-hardcore','InVogue');
insert into artist (FirstName,LastName,Genre,Label) values('Anthony','Damschroder','Alternative metal','Rise');
insert into artist (FirstName LastName Genre Label) values ('Larry', 'Farkas', 'Christian metal', 'Vengeance Rising');
insert into artist (FirstName,LastName,Genre,Label) values ('Eli', 'Prinsen', 'Christian metal', 'Intense');
insert into artist (FirstName,LastName,Genre,Label) values ('Bruce','Swift','heavy metal','Intense');
insert into artist (FirstName, LastName, Genre, Label) values ('Gleen', 'Mancaruso', 'christian rock', 'Joshua');
--query check on artist table--
select * from artist:
--Insert into website table
insert into website_table(Browser_URL,PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
         ('http://www.mymusics.com/billypower','ToothNail Banner','9123412345','He is member of Blenderhead
band', billy.jpg', '2');\\
insert into website_table(Browser_URL.PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
         ('http://www.mymusics.com/edcari','ToothNail Banner','7208912345','He is guitar player of Blenderhead
band','edi.jpg','3');
insert into website_table(Browser_URL,PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
         ('http://www.mymusics.com/stephen','SolidState Banner','7123412345','He is member of HASTE THE
DAY', 'stephen.jpg', '4');
insert into website_table(Browser_URL,PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
          ('http://www.mymusics.com/jimmy','SolidState Banner','9468372567','He is member of HASTE THE
DAY','jimmy.jpg','5');
insert into website_table(Browser_URL,PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
         ('www.facebook.com/beforetheireyesband', 'Before there Eyes Banner', '9198972567', 'He is member of Before there eyes
post hardcore band','moore.jpg','6');
insert into website_table(Browser_URL,PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
         ('http://www.mymusics.com/anthony', 'Eyes Banner', '7298972567', 'He is member of Before there eyes post hardcore
band','anthony.jpg','7');
```

```
insert\ into\ website\_table (Browser\_URL,PageBanner,Contact\_Num,ArtistBio,ArtistImg,ArtistID)\ values
          ('http://www.mymusics.com/larry','DieBanner','7298971234','He is member of Die happy band','larry,ipg','8');
insert into website_table(Browser_URL,PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
          ('http://www.mymusics.com/eli', 'sacredWarriorBanner', '9256781234', 'He is member of Sacred Warrior
band','eli.jpg','9');
insert into website_table(Browser_URL,PageBanner,Contact_Num,ArtistBio,ArtistImg,ArtistID) values
          ('http://www.mymusics.com/bruce', 'sacredWarriorBanner', '5676781234', 'He is member of Sacred Warrior
band','bruce.jpg','10');
insert\ into\ website\_table (Browser\_URL, PageBanner, Contact\_Num, ArtistBio, ArtistImg, ArtistID)\ values
          ('http://www.mymusics.com/gleen','DieBanner','7256781234','He is member of Die happy band','gleen.jpg','1');
-- query the website table
select * from website_table
-- Insert data into Product table
insert into Product(ProductName ProductPrice Units Browser URL) values ("T-
Shirt','50','10','http://www.mymusics.com/stephen');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values ("T-Shirt', '350', '5', 'http://www.mymusics.com/larry');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values
('Headband','100','15','http://www.mymusics.com/larry');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values
('Headband','150','10','http://www.mymusics.com/billypower');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values
('Poster','25','100','http://www.mymusics.com/billypower');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values
('Poster','10','1000','http://www.mymusics.com/gleen');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values
('Headband','50','100','http://www.mymusics.com/gleen');
insert into Product(ProductName, ProductPrice, Units, Browser URL) values (T-
Shirt','200','10','http://www.mymusics.com/gleen');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values ('T-
Shirt', '250', '100', 'http://www.mymusics.com/anthony');
insert into Product(ProductName, ProductPrice, Units, Browser_URL) values ('T-Shirt', '50', '100', 'http://www.mymusics.com/eli');
--query product table
select * from Product
-- Insert data into performances table
insert into Performances(TYPE,ArtistID,Name,Location,Price,Rules) values ('Vocals','2','Ninety Pound
Wuss', 'America', '100', 'Enjoy Tooth and Nail songs by Billy');
insert into Performances(TYPE, ArtistID, Name, Location, Price, Rules) values ('Bass', '2', 'Roadside
Monument', 'America', '1000', 'Enjoy Tooth and Nail songs by Billy');
insert into Performances(TYPE, ArtistID, Name, Location, Price, Rules) values ('Guitar', '3', 'Ninety Pound Wuss', 'New
York','500','Enjoy Tooth and Nail songs by Carrigan');
insert into Performances(TYPE, ArtistID, Name, Location, Price, Rules) values ('lead-vocals', '4', 'The Anti-Mother
Tour','Indianapolis','500','Enjoy Haste the days songs by Keech');
```

```
insert into Performances(TYPE, ArtistID, Name, Location, Price, Rules) values ('clean-vocals', '5', 'Napalm & Noise
Tour', 'Indianapolis', '700', 'Enjoy Haste the days songs by Jimmy');
insert into Performances(TYPE, ArtistID, Name, Location, Price, Rules) values ('lead singer', '6', 'Spring Break Your Heart
Tour', 'California', '2000', 'Enjoy BEFORE THE EYES songs by Nicholas Moore');
insert into Performances(TYPE,ArtistID,Name,Location,Price,Rules) values ('Drumer','7','Shipwreck in the sand Tour','New
York', '1000', 'Enjoy BEFORE THE EYES songs by Anthony Damschroder');
insert into Performances(TYPE,ArtistID,Name,Location,Price,Rules) values ('Drum and Guitar','7','One Moment Management
Tour', 'Oceana', '3000', 'Enjoy BEFORE THE EYES songs by Anthony Damschroder');
insert into Performances(TYPE,ArtistID,Name,Location,Price,Rules) values ('Guitarist','4','Saints and Sinners
Tour', 'Johannesburg', '1500', 'Enjoy Haste the day songs by Keech');
insert into Performances(TYPE ArtistID Name Location Price Rules) values ('Keyboard and vocal','5','Scream the Prayer
Tour', 'Cape town', '2500', 'Enjoy Haste the day songs by Jimmy');
-- Query Performance table
select * from Performances
-- Insert data into MusicTitle table
insert into MusicTitles(MusicName) values ('Prime Candidate for Burnout');
insert into MusicTitles(MusicName) values ('Burning Bridges');
insert into MusicTitles(MusicName) values ('When Everything Falls');
insert into MusicTitles(MusicName) values ('Pressure the Hinges');
insert into MusicTitles(MusicName) values ('Its a Punk Rock Christmas');
insert into MusicTitles(MusicName) values ('The Dawn of My Death');
insert into MusicTitles(MusicName) values ('Untouchable');
insert into MusicTitles(MusicName) values ('The Hi-Fi Horizon');
insert into MusicTitles(MusicName) values ('Rebellion');
insert into MusicTitles(MusicName) values ('Visions of Hell');
--query music titles
select * from MusicTitles
--insert data into music sales
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('2','Tooth & Nail Records','1','200.50',
('19940117'));
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('4',' Solid State Records','2','500',
('20040527'));
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('4',' Solid State Records','3','600',
('20050610')):
insert into MusicSales(ArtistID.PUB_NAME,TITLEID.PRICE.PUB_DATE) values ('5',' Solid State Records','4','250',
('20070223'));
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('5',' Solid State Records','5','750',
('20081127'));
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('6','InVogue Records','6','750',('20081028'));
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('7','InVogue Records','7','1050',
('20100316')):
```

```
insert\ into\ MusicSales (ArtistID,PUB\_NAME,TITLEID,PRICE,PUB\_DATE)\ values\ ('7','InVogue\ Records','8','1500',normalistic of the properties of the prope
('20121112'));
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('8','Master Command Records','9','1000',
('20011207'));
insert into MusicSales(ArtistID,PUB_NAME,TITLEID,PRICE,PUB_DATE) values ('9','Die Happy Records','10','400',
('20000807'));
-- query music sales table
 select * from MusicSales
--Queries for data manipulation
/* Select all columns and all rows from one table */
select * from artist;
/* Select 5 columns and all rows from one table */
                       select ArtistID, FirstName, LastName, Genre, Label
                       from artist;
/*Create views*/
--Create view called BuyPoster
Create view BuyPoster_view as
                       select *
                       from dbo.Product
                       where ProductName='Poster';
--Query View BuyPoster
Select
                       * from dbo.Product
                       where ProductName='Poster';
--Create Performers_View to see the name and information of performers
create view Performers_view as
                         select p.Name,p.Location,p.Price,a.FirstName,a.LastName,a.artistID
                         from Performances p inner join artist a
                         on p.artistID=a.artistID;
 --Query performers view
 Select
                       p.Name, p.Location, p.Price, a.FirstName, a.LastName, a.artistID
                       from Performances p inner join artist a
                       on p.artistID=a.artistID
                       order by artistID asc;
/*Need to update the data */
 -- query before the update
 select * from MusicSales;
```

--update price by increasing 5* price already set for music sales

Answers to Data Questions:

1. What are the artists available to book, what is their musical genres, current location, and price per performance?

	Name	Location	Price	FirstName	LastName	artistID
1	Ninety Pound Wuss	America	100.00	Ed	Power	2
2	Roadside Monument	America	1000.00	Ed	Power	2
3	Ninety Pound Wuss	New York	500.00	Stephen	Keech	3
4	The Anti-Mother Tour	Indianapolis	500.00	Jimmy	Ryan	4
5	Saints and Sinners Tour	Johannesburg	1500.00	Jimmy	Ryan	4
6	Scream the Prayer Tour	Cape town	2500.00	Nicholas	Moore	5
7	Napalm & Noise Tour	Indianapolis	700.00	Nicholas	Moore	5
8	Spring Break Your Heart Tour	California	2000.00	Anthony	Damschroder	6
9	Shipwreck in the sand Tour	New York	1000.00	Larry	Farkas	7
10	One Moment Management Tour	Oceana	3000.00	Larry	Farkas	7

```
--Create Performers_View to see the name and information of performers create view Performers_view as select p.Name.p.Location.p.Price,a.FirstName,a.LastName,a.artistID from Performances p inner join artist a on p.artistID=a.artistID;
```

--Query performers view Select

```
p.Name.p.Location.p.Price,a.FirstName,a.LastName,a.artistID from Performances p inner join artist a on p.artistID=a.artistID order by artistID asc;
```

2. What artists has have posters Milk Boy Art House can buy and sell? What is the quantity available, price per poster, and URL to the poster's link.

 	Results [Messages			•
	Product		Product Price	Units	Browser_URL
1	5	Poster	25.00	100	http://www.mymusics.com/billypower
2	6	Poster	10.00	1000	http://www.mymusics.com/gleen

-- Create view called BuyPoster

Create view BuyPoster_view as select *

select *

from dbo.Product

where ProductName='Poster';

-- Query View BuyPoster

* from dbo.Product

where ProductName='Poster';

3. What are the music sales of artists, and the date they published their songs. Also wish to include their label's name and genre.

	ArtistID	FirstName	LastName	Genre	Label	SaleID	ArtistID	Pub_Name	TitleID	Price	Pub_Date
1	2	Ed	Power	Punk	Tooth & Nail Records	1	2	Tooth & Nail Records	1	7218.00	1994-01-17
2	4	Jimmy	Ryan	Christian metal	Solid State	2	4	Solid State Records	2	18000.00	2004-05-27
3	4	Jimmy	Ryan	Christian metal	Solid State	3	4	Solid State Records	3	21600.00	2005-06-10
4	5	Nicholas	Moore	Post-hardcore	InVogue	4	5	Solid State Records	4	9000.00	2007-02-23
5	5	Nicholas	Moore	Post-hardcore	InVogue	5	5	Solid State Records	5	27000.00	2008-11-27
6	6	Anthony	Damschroder	Alternative metal	Rise	6	6	InVogue Records	6	27000.00	2008-10-28
7	7	Larry	Farkas	Christian metal	Vengeance Rising	7	7	InVogue Records	7	37800.00	2010-03-16
8	7	Lany	Farkas	Christian metal	Vengeance Rising	8	7	InVogue Records	8	54000.00	2012-11-12
9	8	Bi	Prinsen	Christian metal	Intense	9	8	Master Command Records	9	36000.00	2001-12-07
10	9	Bruce	Swift	heavy metal	Intense	10	9	Die Happy Records	10	14400.00	2000-08-07

/* What are the music sales of artists, and the date they published their songs. Also wish to include their label's name and genre */

 $select\ artist. ArtistID,\ artist. FirstName,\ artist. LastName,\ Genre,\ Label,\ MusicSales. SaleID,\ musicsales. ArtistID,\ Pub_Name,\ TitleID,\ Price,\ Pub_Date$

from artist inner join musicsales on artist.ArtistID= musicsales.ArtistID;;

4. <u>List of available performances</u>, <u>ordered by the price of said performance and the type of performance given by artist.</u>

	PerformanceID	ArtistID	Name	Location	Price	Rules	TYPE
1	8	7	One Moment Management Tour	Oceana	3000.00	Enjoy BEFORE THE EYES songs by Anthony Damschroder	Drum and Guitar
2	10	5	Scream the Prayer Tour	Cape town	2500.00	Enjoy Haste the day songs by Jimmy	Keyboard and voca
3	6	6	Spring Break Your Heart Tour	California	2000.00	Enjoy BEFORE THE EYES songs by Nicholas Moore	lead singer
4	9	4	Saints and Sinners Tour	Johannesburg	1500.00	Enjoy Haste the day songs by Keech	Guitarist
5	7	7	Shipwreck in the sand Tour	New York	1000.00	Enjoy BEFORE THE EYES songs by Anthony Damschroder	Drumer
6	2	2	Roadside Monument	America	1000.00	Enjoy Tooth and Nail songs by Billy	Bass
7	5	5	Napalm & Noise Tour	Indianapolis	700.00	Enjoy Haste the days songs by Jimmy	clean-vocals
8	3	3	Ninety Pound Wuss	New York	500.00	Enjoy Tooth and Nail songs by Camigan	Guitar
9	4	4	The Anti-Mother Tour	Indianapolis	500.00	Enjoy Haste the days songs by Keech	lead-vocals
10	1	2	Ninety Pound Wuss	America	100.00	Enjoy Tooth and Nail songs by Billy	Vocals

/* List of available performances, ordered by the price of said performance and the type of performance given by artist. */

select * from performances order by Price desc;

5. List of songs with the artist and its published date.

****	Results	Message	s		
	artist I D		pub_name	musicname	pub_date
1	2	Ed	Tooth & Nail Records	Prime Candidate for Burnout	1994-01-17
2	4	Jimmy	Solid State Records	Burning Bridges	2004-05-27
3	4	Jimmy	Solid State Records	When Everything Falls	2005-06-10
4	5	Nicholas	Solid State Records	Pressure the Hinges	2007-02-23
5	5	Nicholas	Solid State Records	Its a Punk Rock Christmas	2008-11-27
_	_				

6	6	Anthony	InVogue Records	The Dawn of My Death	2008-10-28
7	7	Larry	InVogue Records	Untouchable	2010-03-16
8	7	Larry	InVogue Records	The Hi-Fi Horizon	2012-11-12
9	8	Eli	Master Command Records	Rebellion	2001-12-07
10	9	Bruce	Die Happy Records	Visions of Hell	2000-08-07

/* list of songs with artist and published daate */

select artist.artistID,firstname,pub_name,musicname,pub_date

from (musicsales inner join artist on musicsales artistID=artist artistID) inner join musictitles on

Musictitles.titleID=musicsales.titleID

Where MusicSales.TitleID<11;

6. What music sales are are over \$1,000

	Results E	Messages
	artistID	TOTAL_COST
1	2	7218.00
2	4	39600.00
3	5	36000.00
4	6	27000.00
5	7	91800.00
6	8	36000.00
7	9	14400.00

/* list artists with music sales above 1000*/

select artistID,SUM(Price) AS TOTAL_COST from musicsales GROUP BY artistID having SUM(price)>1000;

7. Who are the artists with publicans released between 1/1/2001 and 12/31/2005

Results Results Messages									
	SaleID	ArtistID	Pub_Name	TitleID	Price	Pub_Date			
1	3	4	Solid State Records	3	21600.00	2005-06-10			
2	2	4	Solid State Records	2	18000.00	2004-05-27			
3	9	8	Master Command Records	9	36000.00	2001-12-07			

/* What artists publications released between January 1, 2001 to December 31,2005? */ select *

from musicsales

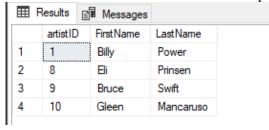
where pub_date>('20010101') and pub_date<('20051231') order by Pub_Date desc;

8. What are the average prices of the products sold.

Results	₽ Mes	ssages
produc	ctName	AVERAGE_PRICE
1 Head	band	100.000000
2 Poste	r	17.500000
3 T-Shir	t	180.000000

/* aggregate function to calculate average price of products sold */

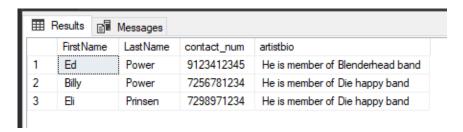
9. Who are the artist who have never performed.



--Listing the ID and names of artists who had never performed*/

SELECT artist.artistID, FirstName,LastName
FROM artist
WHERE NOT EXISTS
(SELECT artistID
FROM performances
WHERE performances.artistID=artist.artistID);

10. What is the contact information and bio for artist with products available.



SELECT FirstName , LastName,contact_num,artistbio

FROM WEBSITE_TABLE INNER JOIN artist ON WEBSITE_TABLE.artistID=artist.artistID

WHERE (SELECT count(*) as count

FROM product

WHERE product.browser_url=WEBSITE_TABLE.browser_url>=2;

11. What are the products with muscian information and website URL

	Browser_URL	FirstName	LastName	productname	pub_name	pub_date	musicname
1	http://www.mymusics.com/billypower	Ed	Power	Headband	Tooth & Nail Records	1994-01-17	Prime Candidate for Burnout
2	http://www.mymusics.com/billypower	Ed	Power	Poster	Tooth & Nail Records	1994-01-17	Prime Candidate for Burnout
3	http://www.mymusics.com/stephen	Jimmy	Ryan	T-Shirt	Solid State Records	2004-05-27	Burning Bridges
4	http://www.mymusics.com/stephen	Jimmy	Ryan	T-Shirt	Solid State Records	2005-06-10	When Everything Falls
5	http://www.mymusics.com/anthony	Larry	Farkas	T-Shirt	InVogue Records	2010-03-16	Untouchable
6	http://www.mymusics.com/anthony	Larry	Farkas	T-Shirt	InVogue Records	2012-11-12	The Hi-Fi Horizon
7	http://www.mymusics.com/larry	Eli	Prinsen	T-Shirt	Master Command Records	2001-12-07	Rebellion
8	http://www.mymusics.com/larry	Eli	Prinsen	Headband	Master Command Records	2001-12-07	Rebellion
9	http://www.mymusics.com/eli	Bruce	Swift	T-Shirt	Die Happy Records	2000-08-07	Visions of Hell

-- Using JOIN. What are the products with muscian information and website URL

 $INNER\ JOIN\ artist\ {\color{blue}on}\ website_table.artistID = artist.artistID)$

INNER JOIN product on product.browser_url=website_table.browser_url)

INNER JOIN musicsales on musicsales.artistID=website_table.artistID)

INNER JOIN musictitles on musictitles.titleID=musicsales.titleID;

12. Who are the artist who have higher than average music sales. With their contact information and their records company

	firstname	lastname	contact_num	pub_name	price
1	Lany	Farkas	7298972567	InVogue Records	37800.00
2	Larry	Farkas	7298972567	InVogue Records	54000.00
3	Nicholas	Moore	9468372567	Solid State Records	27000.00
4	Eli	Prinsen	7298971234	Master Command Records	36000.00
5	Anthony	Damschroder	9198972567	InVogue Records	27000.00

⁻⁻List the publications of the artists that have music sales of more than average*/

select firstname, lastname,contact_num,pub_name,price

 $from \ (artist\ INNER\ JOIN\ website_table\ on\ artist.artistID=website_table\ artistID)\ INNER\ JOIN\ musicsales\ on\ musicsales\ artistID=artist.artistID$

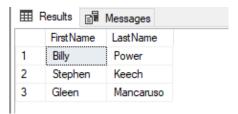
where price> (select avg(price) from musicsales);

13. What artists don't haave an album listed in the music sales table?

--List the first and last name of the Artists who don't have any album listed in the musicsales table. SELECT FirstName. LastName

FROM artist LEFT JOIN musicsales on musicsales artistid=artist artistID

WHERE musicsales.artistID is NULL;



14. What is the URL of the artists who are not able to perform this year?



	browser_url	contact_num
1	http://www.mymusics.com/bruce	5676781234
2	http://www.mymusics.com/eli	9256781234
3	http://www.mymusics.com/gleen	7256781234
4	http://www.mymusics.com/larry	7298971234

⁻⁻List browser urls and contacts of artists that are not performers this year*/

select browser_url,contact_num

from website_table where artistID not in (select artaistID from performances);

GUI Protype:

I decided to use Access for my front end interface.

Report that compares Artist to music sales and their cost of their music sales.

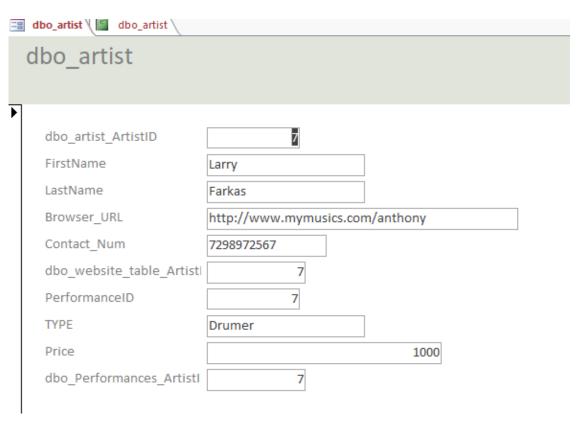
	Artist v	vs MusicSales vs P	erformances		Sunday, Dec	Sunday, December 16, 2018 11:01:37 PM	
dbo_art	ist_ArtistID	dbo_MusicSales_ArtistID	Price	Pub_Date	PerformanceID	FirstName	
	7	7	\$54,000.00	2012-11-12	8	Larry	
	7	7	\$54,000.00	2012-11-12	7	Larry	
	7	7	\$37,800.00	2010-03-16	8	Larry	
	7	7	\$37,800.00	2010-03-16	7	Larry	
	6	6	\$27,000.00	2008-10-28	6	Anthony	
	5	5	\$27,000.00	2008-11-27	10	Nicholas	
	5	5	\$27,000.00	2008-11-27	5	Nicholas	
	4	4	\$21,600.00	2005-06-10	9	Jimmy	
	4	4	\$21,600.00	2005-06-10	4	Jimmy	
	4	4	\$18,000.00	2004-05-27	9	Jimmy	
	4	4	\$18,000.00	2004-05-27	4	Jimmy	
	5	5	\$9,000.00	2007-02-23	10	Nicholas	
	5	5	\$9,000.00	2007-02-23	5	Nicholas	
	2	2	\$7,218.00	1994-01-17	2	Ed	
	2	2	\$7,218.00	1994-01-17	1	Ed	
			\$376,236.00		15	3	

A report that looks at artist performances and sums the total cost for the year if Andrew hired all the musicians once.

Performance Report



A form for artists that give all contact, performance type, and website information .



A product report for andrew to use when estimating average merchandise cost and products.

□ dbo	Product			Sunday, December 16, 2018
				11:14:04 PM
ProductID	ProductName	ProductPrice	Units	Browser_URL
1	T-Shirt	\$50.00	10	http://www.mymusics.com/steph n
2	T-Shirt	\$350.00	5	http://www.mymusics.com/larry
3	Headband	\$100.00	15	http://www.mymusics.com/larry
4	Headband	\$150.00	10	http://www.mymusics.com/billypwer
5	Poster	\$25.00	100	http://www.mymusics.com/billypwer
6	Poster	\$10.00	1000	http://www.mymusics.com/gleer
7	Headband	\$50.00	100	http://www.mymusics.com/gleer
8	T-Shirt	\$200.00	10	http://www.mymusics.com/gleer
9	T-Shirt	\$250.00	100	http://www.mymusics.com/antho
10	T-Shirt	\$50.00	100	http://www.mymusics.com/eli
	Ţ	\$123.50		

Reflection:

Creating a database to to help make booking bands easier is a hobby my roomate Andrew and I enjoy. He is actually the owner of the local Milk Boy Art House concert and mini-store, so I chose this project because I could see a practical use for its final product. I changed the names of the bands and songs that he books, but otherwise, looking back at this project, I wish I had chosen this topic initially. Because, I believe I could have truly gone father with my interface and database capabilities. Initially, I had chosen to do my final project regarding the restaurant industry, a place that I work in and am quite familiar with. However, as I dove into the project earlier this semeter, I could not find the interest or vision to continue it. Looking at my goals for this project, I believe that I could have utilized visio and asp.net to create an acutal website that Andew could use when planning which artists to book. Additionally, I believe that this would allow for samples of the artists' songs to be uploaded, along with potentiall creating a "checkout' style store where Andrews venue customers and concert-goers could go to after or before the concert in order to buy merchandise. I believe that this project has a lot of potential, and avenues it could expand upon because its focus is very straightforward. The goal of this project was not to tackle every single process related to concerts at a venue and artist planning. The main objective was the deliver a solution to the major problem- how can Andrew plan the bands and his merchandise more efficiently. I believe through the use of the Access forms, he will be able to manage it for now. I would like to take this one sten further after the semester is over and

manage it for now. I would like to take this one step further, after the semester is over, and potentially see the website created.