

# DSO 552: SQL Databases for Business Analysts

## Homework 2

### Trojan Entertainment Agency Database

This database manages entertainers, agents, customers, and bookings. Check Figure 1 (on the last page) for more details on the database structure.

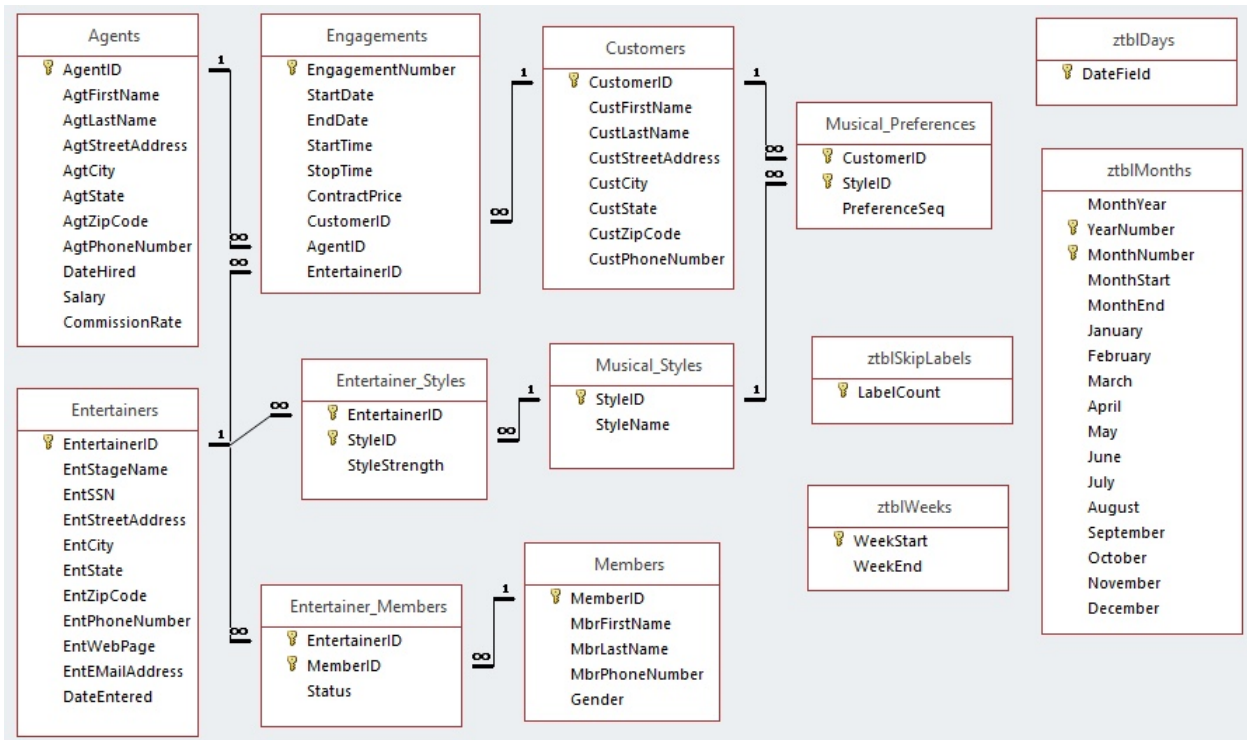


Figure 1: Trojan Entertainment Schema

1. (1point) Show me the list of entertainers based in 'Bellevue', 'Redmond', or 'Woodinville' who do not have a registered email address.

```
SELECT EntStageName, EntPhoneNumber, EntCity
FROM Entertainers
WHERE EntCity In ('Bellevue', 'Redmond', 'Woodinville') AND entemailaddress IS NULL
LIMIT 5;
```

Sample Output:

entstagename	entphonenumber	entcity
Jim Glynn	555-2531	Bellevue
Jazz Persuasion	555-2541	Bellevue

2. (0.5point) Show me all the engagements that started in September 2017 and ran for four days. Consider the enddate as inclusive. Note that you can subtract two date fields to get the days difference between them.

```
SELECT EngagementNumber, StartDate, EndDate
FROM Engagements
WHERE (EndDate - Startdate) = 3 AND startdate BETWEEN '2017-09-01' AND '2017-09-30'
limit 5;
```

Sample Output:

engagementnumber	startdate	enddate
5	2017-09-12	2017-09-15
13	2017-09-18	2017-09-21
17	2017-09-30	2017-10-03

3. (0.5point) Display agents' first and last name, and the engagement dates they booked, sorted by booking start date with the most recent bookings listed first.

```
SELECT Concat(Agents.AgtFirstName, ' ', Agents.AgtLastName) AS AgtFullName, Engagements.StartDate
FROM Agents
INNER JOIN Engagements
ON Agents.AgentID = Engagements.AgentID
ORDER BY StartDate DESC
limit 5;
```

Sample Output:

agtfullname	startdate
William Thompson	2018-03-04
Karen Smith	2018-02-27
William Thompson	2018-02-26
Karen Smith	2018-02-25
Marianne Wier	2018-02-25

4. (1point) Find the agents and entertainers who live in the same postal code. Report the names as well as the postal code.

```
SELECT Concat(Agents.AgtFirstName, ' ', Agents.AgtLastname) AS AgtFullName, Entertainers.EntStageName,
FROM Agents
INNER JOIN Entertainers
ON Agents.AgtZipCode = Entertainers.EntZipCode
limit 5;
```

Sample Output:

agtfullname	entstagename	agtzipcode
Caleb Viescas	Carol Peacock Trio	98052
Caleb Viescas	JV & the Deep Six	98052
Scott Bishop	Country Feeling	98125
Karen Smith	Country Feeling	98125
John Kennedy	Country Feeling	98125

5. (1point) Show me entertainers, the start and end dates of their contracts, and the contract price.

```
SELECT Entertainers.EntStageName, Engagements.StartDate, Engagements.EndDate, Engagements.ContractPrice
FROM Entertainers
INNER JOIN Engagements
ON Entertainers.EntertainerID = Engagements.EntertainerID
limit 5;
```

Sample Output:

entstagename	startdate	enddate	contractprice
Jim Glynn	2017-09-02	2017-09-06	200
Jazz Persuasion	2017-09-11	2017-09-16	590
Jim Glynn	2017-09-12	2017-09-18	470
JV & the Deep Six	2017-09-12	2017-09-15	1130
Country Feeling	2017-09-11	2017-09-15	2300

6. (1point) Find the entertainers who played engagements for customers Berg or Hallmark.

```
SELECT DISTINCT Entertainers.EntStageName
FROM (Entertainers
INNER JOIN Engagements
ON Entertainers.EntertainerID = Engagements.EntertainerID)
INNER JOIN Customers
ON Customers.CustomerID = Engagements.CustomerID
WHERE Customers.CustLastName = 'Berg'
OR Customers.CustLastName = 'Hallmark'
limit 5;
```

Sample Output:

entstagename
Carol Peacock Trio
Coldwater Cattle Company
Country Feeling
Jim Glynn
JV & the Deep Six

7. (1point) How many engagements that started at 1pm in the afternoon have been booked in 2017?

```
SELECT COUNT(DISTINCT engagementnumber)
FROM engagements
WHERE startdate between '2017-01-01' AND '2018-01-01' AND starttime = '13:00:00'
```

Sample Output:

count
6

8. (1point) List all entertainers and any engagements they have booked that had contract prices above 1000.

```
SELECT Entertainers.EntertainerID, Entertainers.EntStageName, Engagements.EngagementNumber, Engagements
FROM Entertainers
LEFT JOIN Engagements
```

```
ON Entertainers.EntertainerID = Engagements.EntertainerID
where Engagements.contractprice > 1000
limit 5;
```

Sample Output:

entertainerid	entstagename	engagementnumber	startdate	customerid
1001	Carol Peacock Trio	110	2018-02-12	10006
1001	Carol Peacock Trio	101	2018-01-23	10004
1001	Carol Peacock Trio	73	2017-12-30	10014
1001	Carol Peacock Trio	24	2017-10-02	10001
1001	Carol Peacock Trio	12	2017-09-19	10014

9. (1point) Count the number of customers with no bookings

```
SELECT COUNT(DISTINCT Customers.customerid)
FROM Customers
LEFT JOIN Engagements
ON Customers.CustomerID = Engagements.CustomerID
WHERE Engagements.EngagementNumber IS NULL
limit 5;
```

Sample Output:

count
2

10. (1point) List entertainers who have either never been booked or do not have a webpage or email address.

```
SELECT Entertainers.EntertainerID, Entertainers.EntStageName
FROM Entertainers
LEFT JOIN Engagements
ON Entertainers.EntertainerID = Engagements.EntertainerID
WHERE (Engagements.EngagementNumber Is Null) or (Entertainers.entwebpage is null) or (entertainers.entemail is null)
limit 5;
```

Sample Output:

entertainerid	entstagename
1004	Jim Glynn
1005	Jazz Persuasion
1004	Jim Glynn
1008	Country Feeling
1002	Topazz