



Taxi Management System Database Report

EMRE KOYBASI - 104772

Microsoft SQL Management Studio 2018

Table definition language

```
CREATE TABLE Cities (
```

```
    vehicle_number int,
```

```
    plate nvarchar(255)
```

```
        type nvarchar(255)
```

```
        examination_result nvarchar(MAX)
```

```
);
```

```
CREATE TABLE Corporate_cars (
```

```
    vehicle_number int,
```

```
    plate nvarchar(255)
```

```
        type nvarchar(255)
```

```
        examination_result nvarchar(MAX)
```

```
);
```

```
CREATE TABLE Customer_information (
```

```
    customer_number int,
```

```
    customer_name nvarchar(255)
```

```
        customer_surname nvarchar(255)
```

```
);
```

```
CREATE TABLE Driver_information (
```

```
    driver_number int,
```

```
    driver_name nvarchar(255)
```

```
        driver_surname nvarchar(255)
```

```
        driver_licence_num int,
```

```
        driver_health nvarchar(MAX)
```

```
);
```

CREATE TABLE Notification (

notice_number int,

customer_number int,

driver_number int,

shipping_number int,

city_number int,

score int,

);

CREATE TABLE Persons (

PersonID int,

LastName nvarchar(255)

FirstName nvarchar(255)

Address nvarchar(255)

City nvarchar(255)

);

CREATE TABLE Shipping_Information (

shipping_number int,

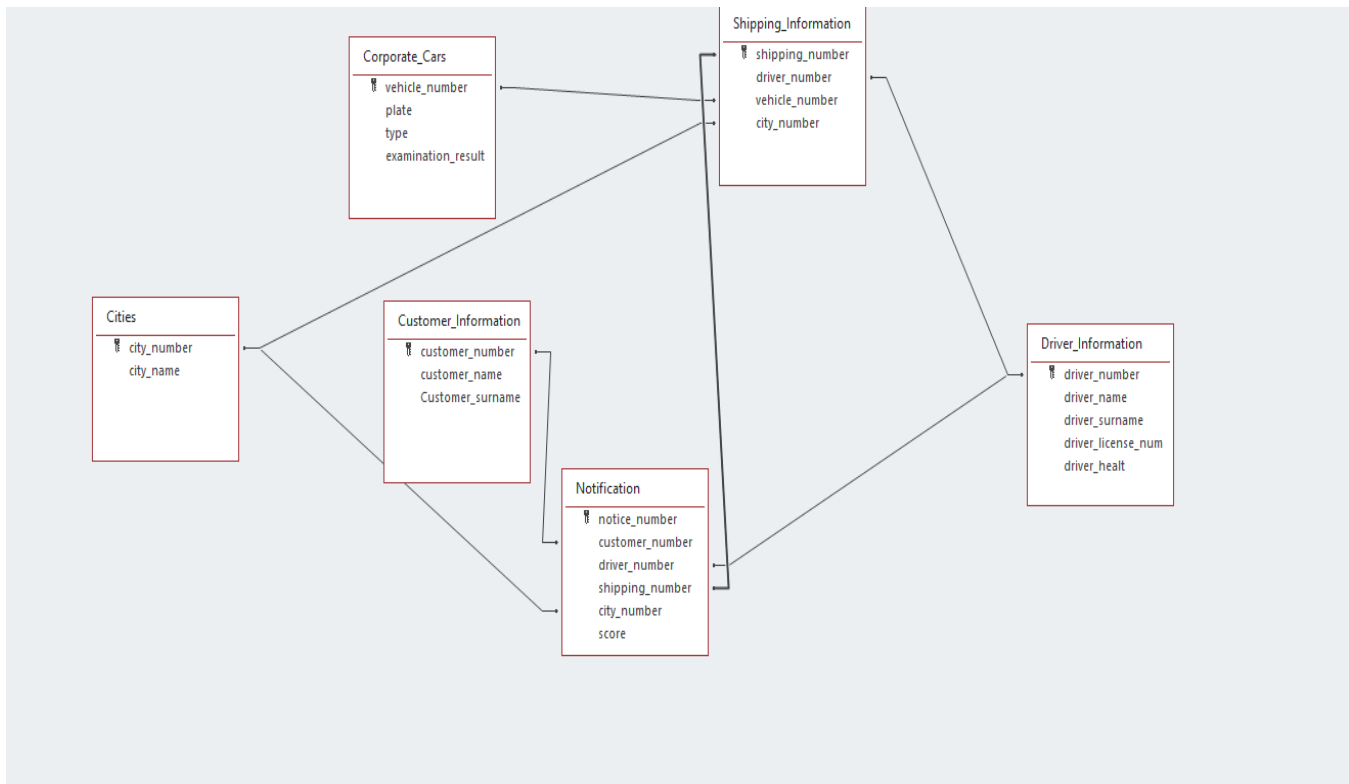
driver_number int,

vehicle_number int,

city_number int,

);

Entity Relationship Diagram



QUERYS OF CITIES

Declare @id int

Declare @loop int

Select @loop = 1

Select @id = 1

While @loop <= 3000

begin

Insert Into Cities Values(@id, 'City_name' + CONVERT(varchar(255),@id)

Select @id = @id + 1

Select @loop = @loop + 1

End

QUERY OF CORPORATE CARS

```
Declare @id int

Declare @loop int

Select @loop = 1

Select @id = 1

While @loop <= 3000

begin

Insert Into Corporate_Cars Values(@id, 'Plate' + CONVERT(varchar(30),@id), 'Type', 'Ex')

Select @id = @id + 1

Select @loop = @loop + 1

End
```

QUERY OF CUSTOMER INFORMATION

```
Declare @id int

Declare @loop int

Select @loop = 1

Select @id = 1

While @loop <= 3000

begin

Insert Into Customer_Information Values(@id, 'Customer_name' + CONVERT(varchar(30),@id), 'Customer_surname')

Select @id = @id + 1

Select @loop = @loop + 1

End
```

QUERY OF DRIVER INFORMATION

Declare @id int

Declare @loop int

Select @loop = 1

Select @id = 1

While @loop <= 3000

begin

Insert Into Driver_Information Values(@id, 'Driver_name' + CONVERT(varchar(30),@id), 'Driver_surname',@id,'Driver_healt')

Select @id = @id + 1

Select @loop = @loop + 1

End

QUERY OF NOTIFICATION

Declare @id int

Declare @loop int

Select @loop = 1

Select @id = 1

While @loop <= 3000

begin

Insert Into Notificationn Values(@id, @id,@id,@id,@id,@id)

Select @id = @id + 1

Select @loop = @loop + 1

End

QUERY OF PERSONS

Declare @id int

Declare @loop int

Select @loop = 1

Select @id = 1

While @loop <= 3000

begin

Insert Into Persons Values(@id, 'Last_name' + CONVERT(varchar(30),@id), 'First_name' + CONVERT(varchar(30),@id), 'Address' + CONVERT(varchar(30),@id),'City' + CONVERT(varchar(30),@id))

Select @id = @id + 1

Select @loop = @loop + 1

End

QUERY OF SHIPPING INFORMATION

Declare @id int

Declare @loop int

Select @loop = 1

Select @id = 1

While @loop <= 3000

begin

Insert Into Shipping_Information Values(@id,@id,@id,@id)

Select @id = @id + 1

Select @loop = @loop + 1

End

Transaction Performance Analysis Overview

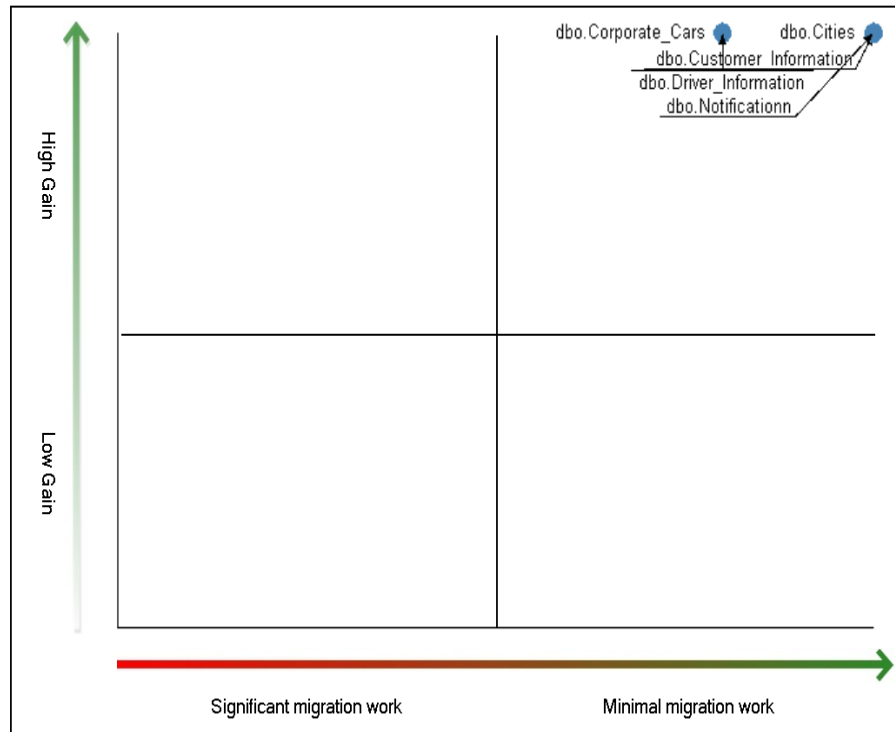
Recommended Tables Based on Usage

[TaxiManagement]

on DESKTOP-RJ2GD6N at 6.07.2021 07:01:53

The following chart contains the top candidate tables for memory optimization based on the access patterns of your workload. The horizontal axis represents decreasing effort of memory optimization, while the vertical axis represents increasing benefits of memory optimization in your workload. You should prioritize the tables in the top right corner of the chart for memory optimization.

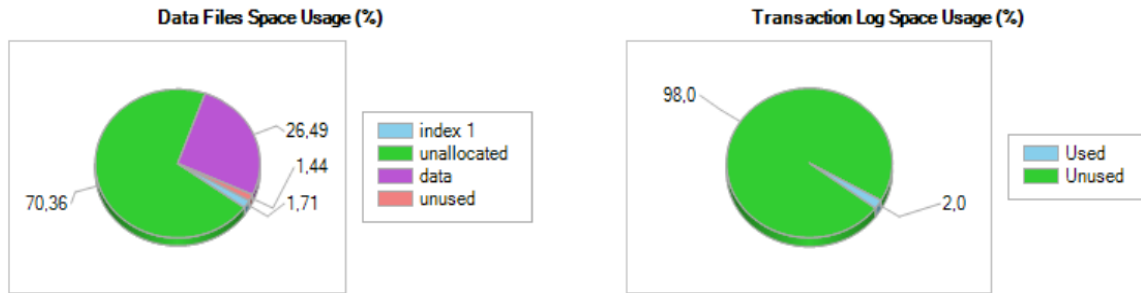
Select number of Tables:
5
10
15
20
25
30



Disk Usage

This report provides overview of the utilization of disk space within the Database.

Total Space Reserved	208,00 MB
Data Files Space Reserved	72,00 MB
Transaction Log Space Reserved	136,00 MB



☐ Data/Log Files Autogrow/Autoshrink Events

Event	Logical File Name	Start Time	Duration (ms.)	Change In Size (MB)
Log File Auto Growth	TaxiManagement_log	3.07.2021 09:27:40	47	64,00
Log File Auto Growth	TaxiManagement_log	3.07.2021 09:27:33	47	64,00

☐ Disk Space Used by Data Files

Filegroup Name	Logical File Name	Physical File Name	Space Reserved	Space Used
PRIMARY	TaxiManagement	C:\Program Files\Microsoft SQL Server\MSSQL15.MSSQLSERVER\MSSQL\DATA\TaxiManagement.mdf	72,00 MB	21,63 MB

Disk Usage by Top Tables

Table Name	# Records	Reserved (KB)	Data (KB)	Indexes (KB)	Unused (KB)
dbo.Cities	614.369	17.288	17.264	8	16
dbo.Driver_Information	3.010	392	336	8	48
dbo.Customer_Information	3.010	328	264	8	56
dbo.Persons	3.000	264	216	8	40
dbo.Corporate_Cars	3.010	200	160	8	32
dbo.Notificationnn	3.010	136	104	8	24
dbo.Shipping_Information	3.010	136	80	8	48
dbo.sysdiagrams	0	0	0	0	0

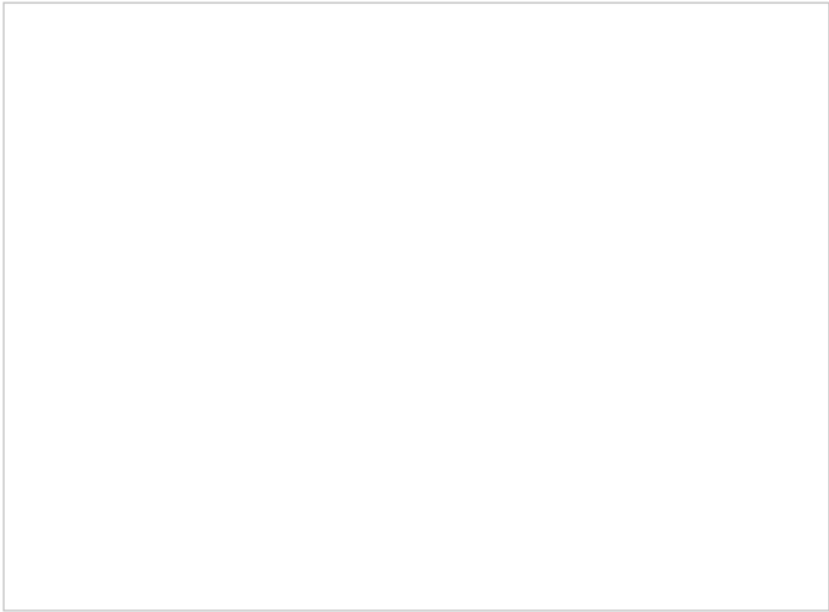
User Statistics

Login Name	User Name	# Active Sessions*	# Active Connections*	# Active Requests	# Open Transactions	# Active Cursors	CPU Time (ms.)	Memory Usage (KB)	# Reads	# Writes	Last Request Start Time	Last Request End Time
DESKTOP-RJ2GD6NUUser	User	2	2	2	0	0	1.423,00	64	224	10	6.07.2021 07:14:28	6.07.2021 07:14:28

Total Memory Usage By Optimized Objects

Total Memory Allocated To Memory Optimized Objects: 0,00 MB

Total Memory Usage By Memory Optimized Objects (MB)



- System Allocated Memory
- Table Used Memory
- Table Unused Memory
- Index Used Memory
- Index Unused Memory