IS455 - Database Design & Prototyping

Semester: Fall 2019 Instructor: Kevin Trainor Assignment: Final Project

**Course Component: Final Project** 

**Grading Rubric** 

#### **Submission**

#### Timeliness (5 available points)

#### Requirements

Must be submitted by date and time indicated in the weekly schedule.

Percent Credit	Description
100	On Time
0	Late (10 points off)
0	Not submitted or submitted too late

#### File Submitted (5 available points)

#### Requirements

Project submission must be in a gradable state upon first submission. Deduction will be made for students who must resubmit their work due to an ungradable prior submission.

Submit only 1 file.

File type must be .ZIP.

Submitted file must be named according to the instructions (e.g. lastName\_firstName\_final\_project.zip).

Directory must be named according to the instructions (e.g. lastName\_firstName\_final\_project).

.SQL files within the directory must be named according to the instructions.

Percent Credit	Description
100	Meets all expectations.
50	Meets nearly all expectations.
0	Does not meet expectations.
0	Not submitted or submitted too late.

#### The Database

#### Physical Database Implementation (10 available points)

#### Requirements

All tables from logical design implemented.

All relationships from logical design implemented.

Primary keys from logical design identified and constrained.

Foreign keys from logical design identified and constrained.

Indexes implemented for primary keys and frequently used secondary keys.

All column data types from logical design implemented

Columns allow NULL values only when appropriate. See test data values for guidance.

AUTO\_INCREMENT feature used for appropriate primary key columns.

UNIQUE column constraint used for non-primary-key fields where appropriate. This is particularly important for text -based name columns that are associated with integer primary keys. columns.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

# Populate Test Data (10 available points)

# Requirements

All test data provided must have been properly loaded to create a properly populated database.

Missing data values represented as NULL.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

# The SQL Scripts

## 01\_restore\_populated\_www\_database.sql (5 available points)

## Requirements

Includes a proper combination of DROP DATABASE and CREATE DATABASE commands to insure that the script will run properly whether or not there is a pre-existing copy of the database on this server.

Names database schema "www".

Inserts data into tables for testing.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 02\_phone\_list.sql (5 available points)

## Requirements

Includes USE www;

Produces expected result set.

Result set has the required number of rows.

Result set has required columns in the required order.

Result set has appropriate column names.

Rows in result set are sorted in required order using ORDER BY.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 03\_guide\_roles\_list.sql (5 available points)

## Requirements

Includes USE www;

Produces expected result set.

Result set has the required number of rows.

Result set has required columns in the required order.

Result set has appropriate column names.

Rows in result set are sorted in required order using ORDER BY.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 04\_employee\_availability\_list.sql (5 available points)

# Requirements

Includes USE www;

Produces expected result set.

Result set has the required number of rows.

Result set has required columns in the required order.

Result set has appropriate column names.

Rows in result set are sorted in required order using ORDER BY.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 05\_booking\_summary.sql (5 available points)

## Requirements

Includes USE www;

Produces expected result set.

Result set has the required number of rows.

Result set has required columns in the required order.

Result set has appropriate column names.

Rows in result set are sorted in required order using ORDER BY.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 06\_trip\_roster.sql (5 available points)

## Requirements

Includes USE www;

Produces expected result set.

Result set has the required number of rows.

Result set has required columns in the required order.

Result set has appropriate column names.

Rows in result set are sorted in required order using ORDER BY.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 07\_trip\_detail\_sheet.sql (5 available points)

# Requirements

Includes USE www;

Produces expected result set.

Result set has the required number of rows.

Result set has required columns in the required order.

Result set has appropriate column names.

Rows in result set are sorted in required order using ORDER BY.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 08\_add\_a\_new\_reservation.sql (5 available points)

# Requirements

Includes USE www;

Hard coded key values produce expected results when scripts are run in proper order.

Scripts include a series of SQL statements that maintain database referential integrity.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 09\_transfer\_a\_reservation.sql (5 available points)

# Requirements

Includes USE www;

Hard coded key values produce expected results when scripts are run in proper order.

Scripts include a series of SQL statements that maintain database referential integrity.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## 10\_delete\_a\_reservation.sql (5 available points)

# Requirements

Includes USE www;

Hard coded key values produce expected results when scripts are run in proper order.

Scripts include a series of SQL statements that maintain database referential integrity.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## 11\_add\_a\_new\_employee.sql (5 available points)

# Requirements

Includes USE www;

Hard coded key values produce expected results when scripts are run in proper order.

Scripts include a series of SQL statements that maintain database referential integrity.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## 12\_delete\_an\_existing\_employee.sql (5 available points)

# Requirements

Includes USE www;

Hard coded key values produce expected results when scripts are run in proper order.

Scripts include a series of SQL statements that maintain database referential integrity.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 13\_add\_a\_new\_trip.sql (5 available points)

# Requirements

Includes USE www;

Hard coded key values produce expected results when scripts are run in proper order.

Scripts include a series of SQL statements that maintain database referential integrity.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### 14\_delete\_an\_existing\_trip.sql (5 available points)

# Requirements

Includes USE www;

Hard coded key values produce expected results when scripts are run in proper order.

Scripts include a series of SQL statements that maintain database referential integrity.

Scripts produce required results in the database.

Percent Credit	Description
100	Substantially exceeds expectations
95	Meets all expectations.
90	Meets nearly all expectations.
80	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

**Total Available Points = 100**