**F20 COMP20 Assign 2 Date due: Tuesday Nov 24**

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In Blackboard, hand in:

1. This document with a screenshot of your model at the end of this document, make sure I can view all tables/columns/relationships since you’re not submitting your .mwb file (you can switch to landscape mode in Word if needed - Layout/Orientation/Landscaping)
2. Script file named **A2YourName**.**sql** that contains your forward-engineered code and code that creates the stored routines.

**STEP 1**

Create a EERD in Workbench, design must be in 3NF ( /20)

Forward engineer your diagram to a script file named **A2YourName**.**sql** (/10)

Entities and data types are up to you. Use part of table name in column names where possible.

Schema name is **A2YourLastName.**

**Be sure to carefully read entire assignment before starting your design!** Think about what you need to store in the database vs what a future routine or query can determine.

Canuck Adventures (CA) is a small business that organizes day-long guided hiking, biking, or paddling trips in eastern Canada – Quebec, New Brunswick, and Nova Scotia only. CA is a family-run business that started in 2014. Many of the employees are family members. The family wants summary data such as which trip is the most popular and which time of year is most requested, for example.

The tours are given a name e.g. Hopewell Rocks Loop; a meet up location, distance of trip in kms., and the maximum size of group. For example, some hikes have a maximum group size of 6, a different hiking trip may have a maximum of 15 customers. CA are considering offering winter snowshoeing trips but haven’t decided yet.

Since the trips are escorted, data about the guides is needed as well. Guides are hired on a contract basis. All get minimum wage plus an extra 20% if their group is more than 10. Typically guides will receive tips from customers at the end of the trip. You don’t need to calculate or store guides wages for a particular trip in this assignment.

Trips have a base price plus there may be additional fees for equipment rental. There is a 5% discount for customers over 65 and a student discount, also 5%. Any customer will also get a 10% discount off base price if they’ve taken a trip with CA before.

**STEP 2**

Add 2 or 3 rows to each of your tables. You can make up data for your rows, but it should make sense to the topic of the tables and instructions above.

**STEP 3**

Write the MySQL code to create 2 procedures and 1 function as described below. Store your two procedures and function in same script file as the tables and insert statements.

Comment out your function and procedures with one /\* before first routine only.

Include SELECT statements that will clearly show state of your tables before and after the calls so I’ll know what data to enter. Use the function/procedure names shown below.

1. Create a **FUNCTION** that returns a trip’s ID (it’s primary key) based on the trip’s name.

**fetchTripID**(the trip name here**)**

( /10)

1. Create a **PROCEDURE** that will add a new reservation for one trip for an existing customer. For the trip, you only have the trip’s name to use, therefore, use the fetchTripID function from question 1. You may have different parameters than I have listed here.

**createReservation(**trip name, customer’s ID**)**

( /10)

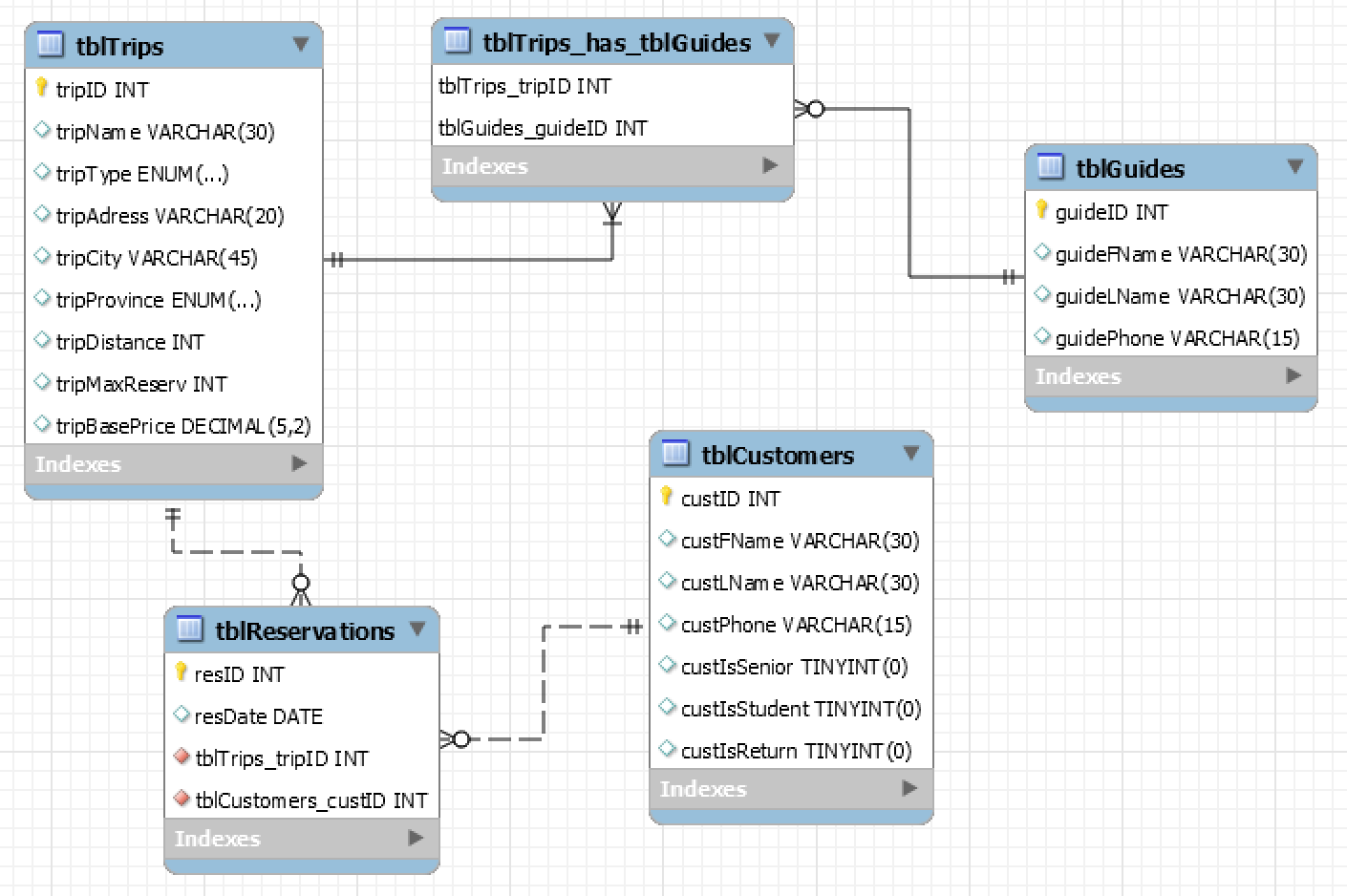
1. Create a **PROCEDURE** that will delete a customer **and** any trips they’ve booked. Your procedure will input the customer’s ID (or whatever you used for the primary key).

Use a **transaction** and only update the database if there are not any errors.

**deleteCustAndTrips(**customer’s ID**)**

Ensure you have a customer with at least two trips booked to test this procedure. When testing this, I will call this procedure twice: with a non-existent customer and an existing customer.

( /10)

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