**CPSC 304, Section 102**

**In-Class Exercise #1: E-R Diagrams**

**September 17, 2020**

Each student must hand in his/her own work. It is OK to collaborate with a friend, but *not* to copy-and-paste someone’s answer. You need to hand-write or type your own answer.

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| **Name of Student (last, first)** | **Student Number** |
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Like the trees on Main Mall, the bank has “branches”.

Each branch is located at a particular location (street address and city) and is identified by a unique name (like “UBC Central”, “UBC CS Basement”, “UBC Downtown”, “UBC Okanagan”, etc.) Each year the bank’s board defines the yearly budget for each branch, and gives the branch a rating (which is a number from 1 to 10).

A bank’s customer is identified by their customer name and phone number (combined). The bank also keeps track of each customer’s current street address and city.

The bank offers accounts and loans to its customers. Each account and each loan have a unique ID number and the account and loan are created and maintained by a single branch. Each account is assigned to one or more customers and its balance can never be negative. A loan is always assigned to a single customer, has a fixed interest rate (currently a very attractive 8%), and its balance cannot be negative, either.

People with “no fixed address” are no longer considered for loans. This is because the “UBC CS Basement” branch lent such a person some money, and never got the money back.

Draw an E-R diagram (using the textbook’s notation) that models the relevant information provided above for the UBC Bank.

