

Database Systems Lab

SESSION 7

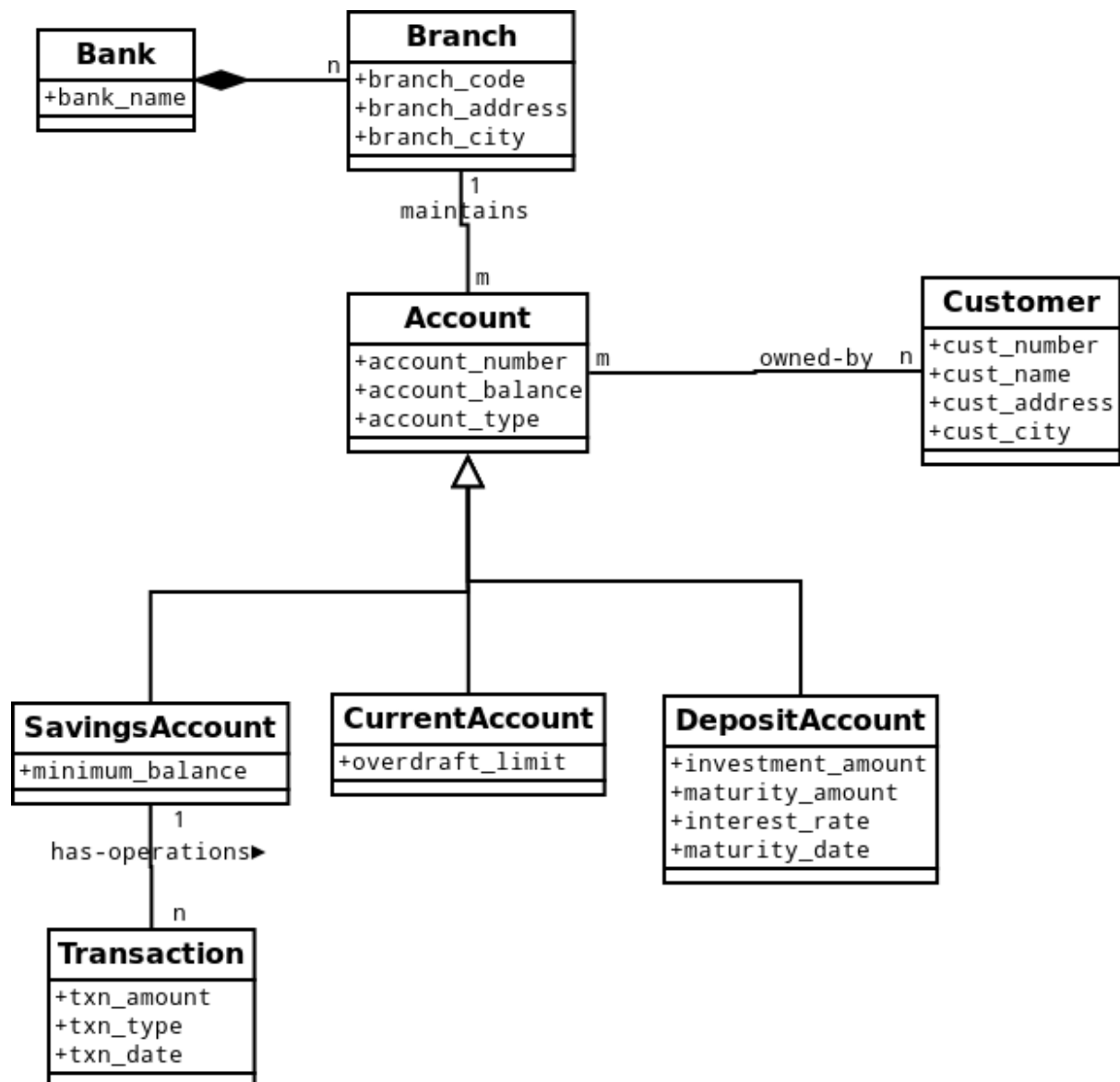
Relational Database Design through Conceptual Modeling

In this lab session, you will learn how to design a relational database through conceptual modeling.

Tasks to be performed

1. Study the conceptual database design

Study the reference solution given to you for the conceptual design of the Bank Database case study.



2. Carry out OR Mapping

Using the object-relational (OR) mapping guidelines given to you, transform the UML class diagram conceptual design into a relational design.

Document your relational database using the following template:

Table name = EMPLOYEE

Name of column	Data type	Constraints (PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
EMP_ID	Number	PK, Surrogate
Emp_Name	String	NOT NULL
Dept_ID	Number	FK references Department.Dept_ID, NOT NULL

Note: DDL statements are NOT needed in this session.

What to upload

1. Create a document named <rollno>_rdb_design.doc
2. Insert the UML class diagram into the document as an image
3. Show the relational database design as shown in the example above
4. Convert the file into PDF and upload to LMS assignment