Homework #1 (20 points)   **Due:** February 04, 2026, Wednesday

Purpose: This homework is to get you familiar with the Entity-Relationship Model basics and interpretation.

Assignment:

Note: Do not write down your answers on the diagram provided. Type your answers in a Word (or a text) document called _hw-1.docx_ (or _hw-1.txt)_, put your full name at the top, and submit the file on Blackboard.

Interpret the E-R diagram of the BANK database on the second page.

1. Identify each entity (indicate if the entity is a weak entity) and its key attribute.
    Also, identify its attributes. Indicate whether an attribute is composite, multivalued, or derived.

2. For each relationship, identify the cardinality ratio (one-to-one, one-to-Many, Many-to-one, or Many-to-Many), and describe the information it conveys, considering both sides of the relationship.

3. For each relationship, identify the participation constraints (total or partial participation) and describe the information it conveys, considering both sides of the relationship.

4. Indicate if the relationship is an identifying relationship (i.e., a relationship of a weak entity).

5. Indicate attribute(s) of a relationship, if any.

Figure 3.21
An ER diagram for a BANK database schema.