E-R Diagram Mapping

Database System Concepts
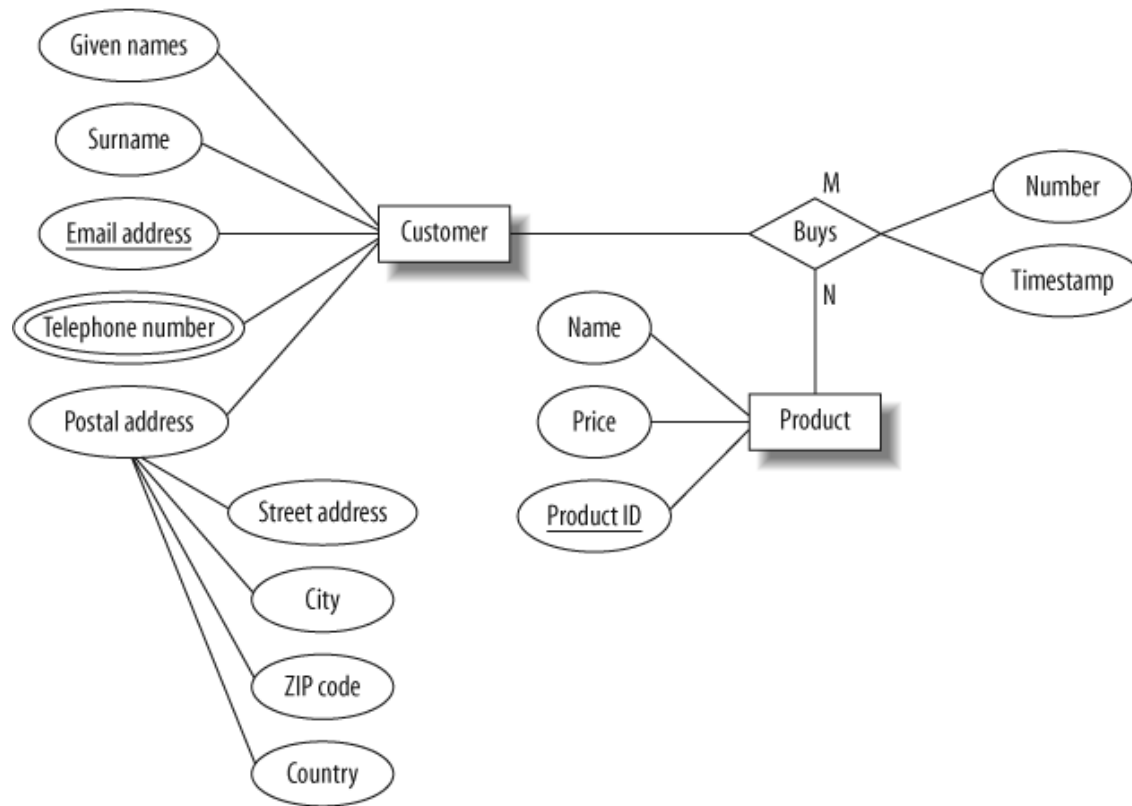
E-R Diagram Mapping Steps

❑ E-R Diagram Mapping Steps

   ❑ Step 1: Regular entity types and single valued attributes

   ❑ Step 2: Weak Entity Type and Single Value Attribute

   ❑ Step 3: Binary 1:1 Relationship Type

   ❑ Step 4: Regular binary 1:N relationship type

   ❑ Step 5: Binary M:N relationship type

   ❑ Step 6: Ternary or higher relationship types

   ❑ Step 7: Multi-valued attribute

Practice 1

❑ Given the following ER Diagram, map it into logical schemas

Practice 1

❑ Order E-R Diagram Mapping Steps

✓ **Step 1: Regular entity types and single valued attributes**

- **Customer(<u>Email_address</u>, Given_names, Surname, Street_address, City, ZIP_code, Country)**
- **Product(<u>Product_ID</u>, Price, Name)**

✓ **Step 2: Weak Entity Type and Single Value Attribute**

- **Not applicable**

✓ **Step 3: Binary 1:1 Relationship Type**
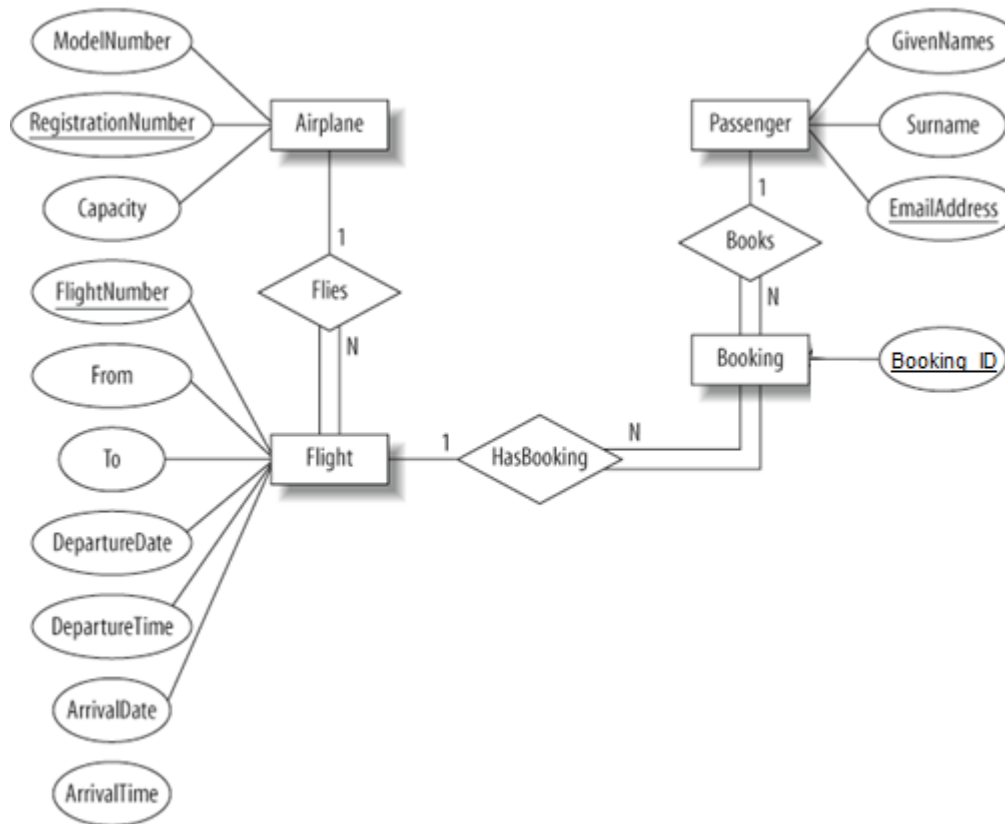
- **Not applicable**

Practice 1

❑ Order E-R Diagram Mapping Steps

- ✓ **Step 4: Regular binary 1:N relationship type**
  - ▪ **Not applicable**

- ✓ **Step 5: Binary M:N relationship type**
  - ▪ **Buys(<u>Email_address</u>, <u>Product_ID</u>, Number, Timestamp)**

- ✓ **Step 6: Ternary or higher relationship types**
  - ▪ **Not applicable**

- ✓ **Step 7: Multi-valued attribute**
  - ▪ **Customer_Telephone(<u>Telephone_number</u>, <u>Email_address</u>)**
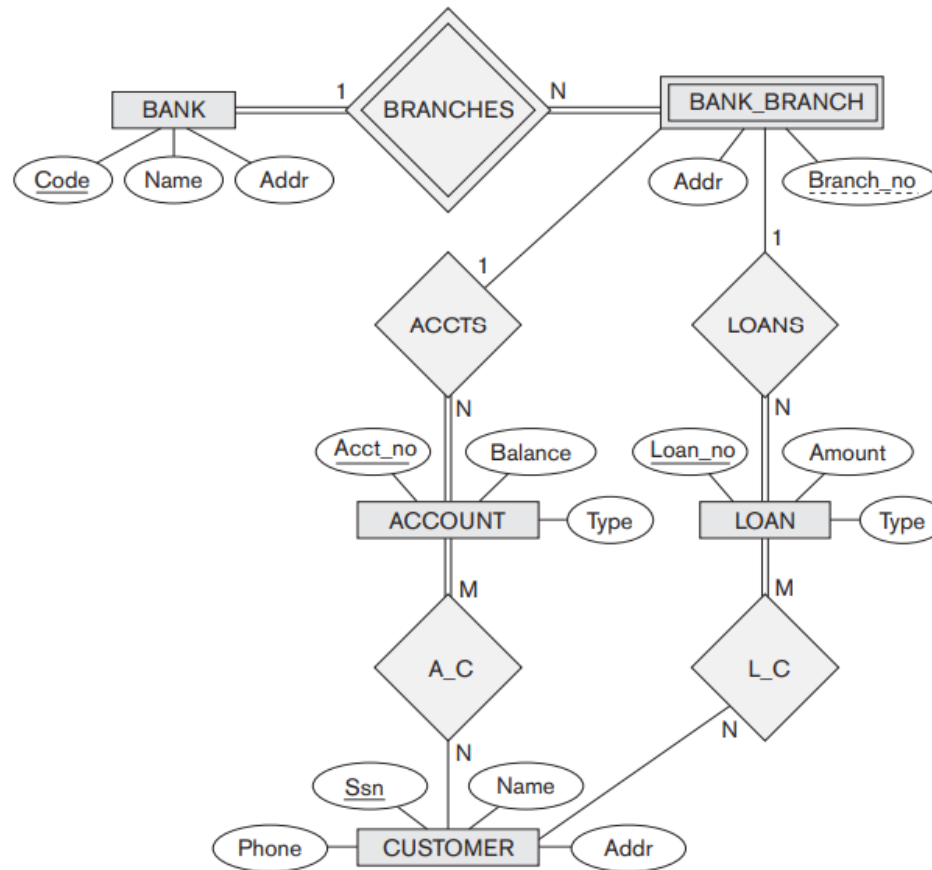
Task 1

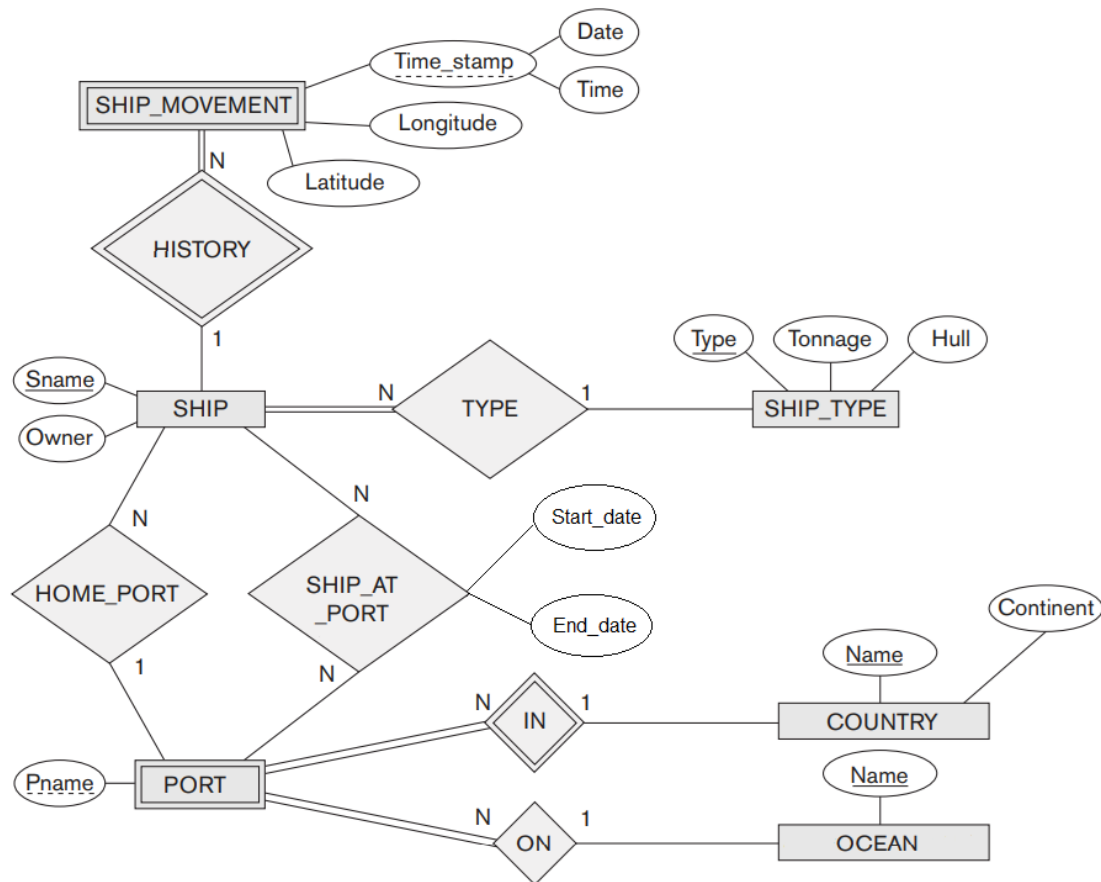❑ Given the following ER Diagram, map it into logical schemas

Task 2

☐ Given the following ER Diagram, map it into logical schemas

Task 3

❏ Given the following ER Diagram, map it into logical schemas

Questions?

SEE YOU NEXT TIME!