

NAME: _____

CLASS: _____

Entity-Relationship Modeling

DataHouse Reality

The following describes this organization:

- The firm has a number of sales offices in several states. Attributes of sales office include Office_Number (identifier) and Location.
- Each sales office is assigned one or more employees, Attributes of employee include Employee_ID (identifier) and Employee_Name. An employee must be assigned to only one sales office.
- For each sales office, there is always one employee assigned to manage that office. An employee may manage only the sales office to which she is assigned.
- The firm lists property for sale. Attributes of property include Property_ID (identifier) and Location. Components of Location include Address City, State, and Zip_Code.
- Each unit of property must be listed with one (and only one) of the sales office. A sales office may have any number of properties listed, or may have no properties listed.
- Each unit of property has one or more owners. Attributes of owners are Owner_ID (identifier) and Owner_Name. Each owner has one or more properties. An attribute of the relationship between property and owner is Percent_Owned. (HINT: It is possible for relationships to have attributes. We will cover this in more detail next class.)

If you have a pencil you may want to use it for these exercises.

In-Class Exercise #1

Draw the entities for 'DataHouse Reality'. Make sure you leave adequate space between your entities.

In-Class Exercise #2

Modify your diagram to incorporate attributes and identifiers.

In-Class Exercise #3

Modify your diagram to incorporate relationships between entities.

In-Class Exercise #4

Add minimum and maximum cardinalities to your diagram for each of your relationships.