ORACLE Academy

Hierarchies and Recursive Relationships

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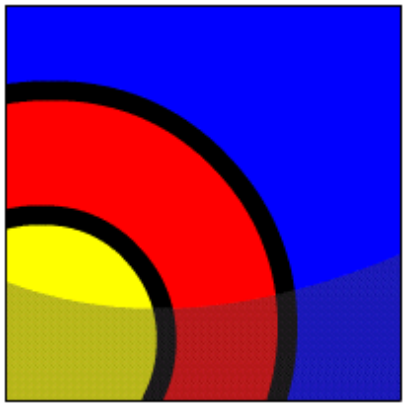
What Will I Learn?

In this lesson, you will learn to:



- Define and give an example of a hierarchical relationship
- Identify the UIDs in a hierarchical model
- Define and give an example of a recursive relationship
- Represent a recursive relationship in an ERD given a scenario
- Construct a model using both recursion and hierarchies to express the same conceptual meaning

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Why Learn It?

Often, roles are organized by hierarchy -- at work (manager, crew chief, front-counter clerk, food preparers), or in school (headmaster or principal, assistant headmaster or assistant principal, teachers, staff). Hierarchical data is very common. Understanding it will help you model:

- Business organizational charts
- Building structures
- Family trees

and many other hierarchies found in the real world.

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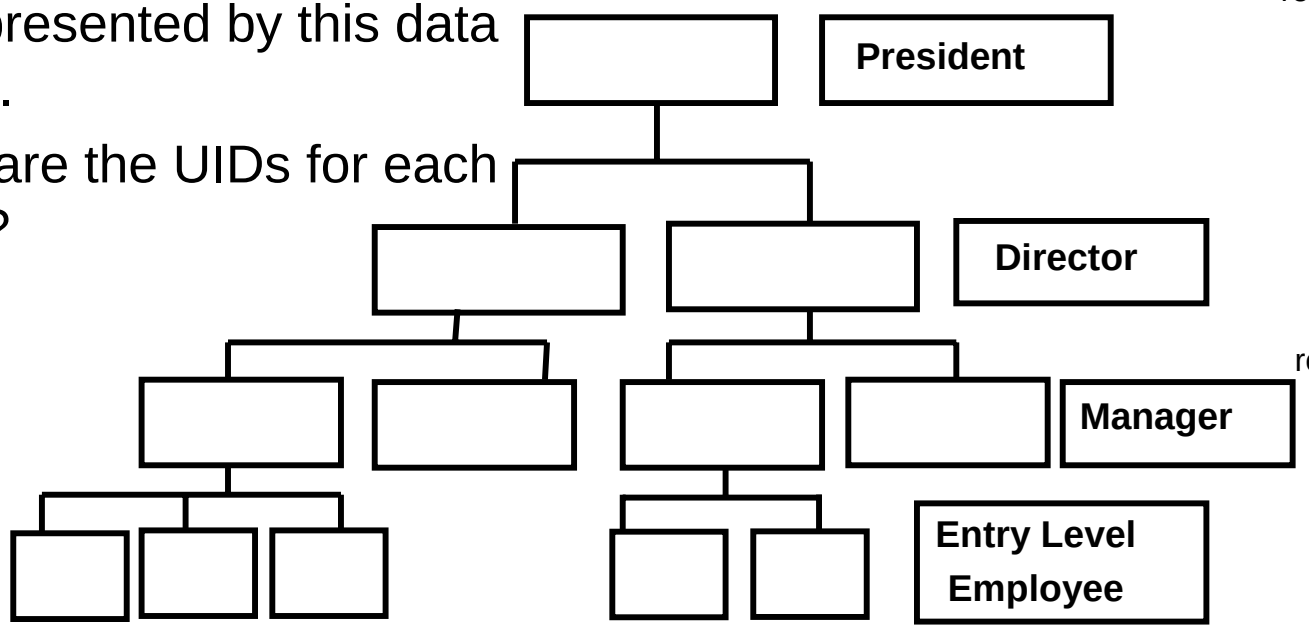
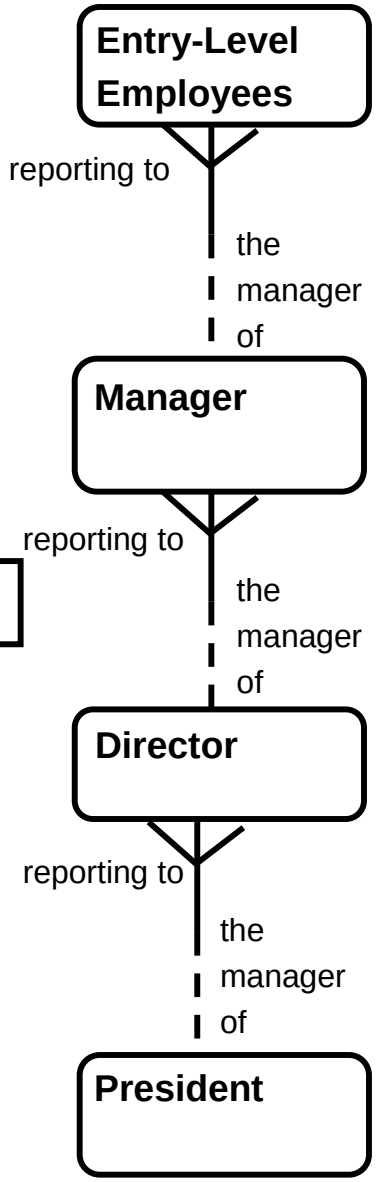
Tell Me / Show Me

An organizational chart can be represented by this data model.

What are the UIDs for each entity?





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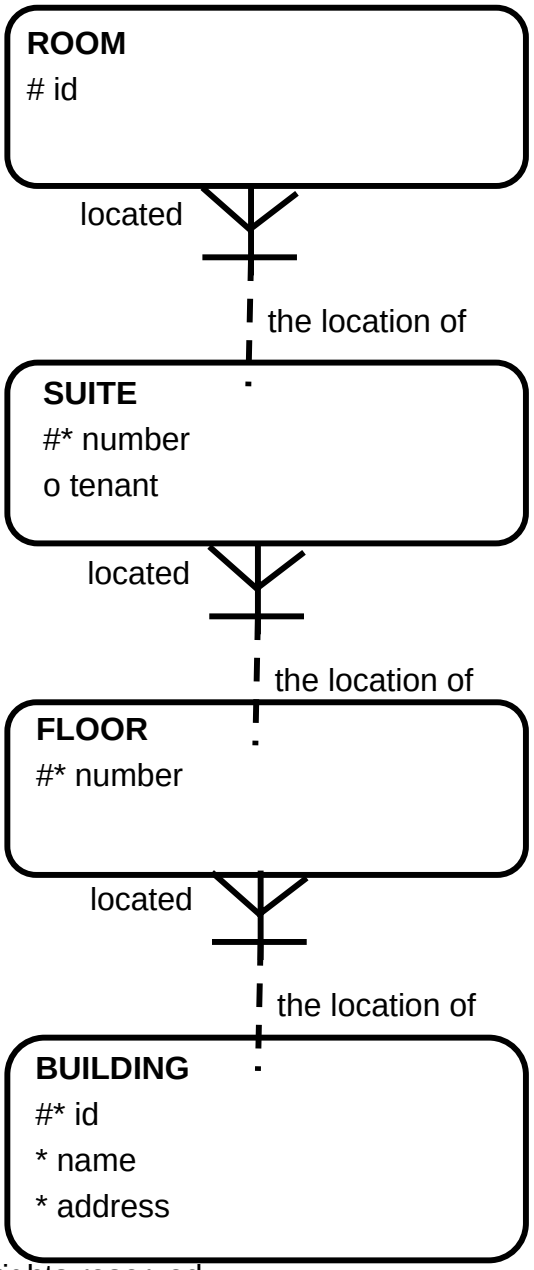
What about this ERD?

What are the UIDs for each entity? (notice the barred relationships).



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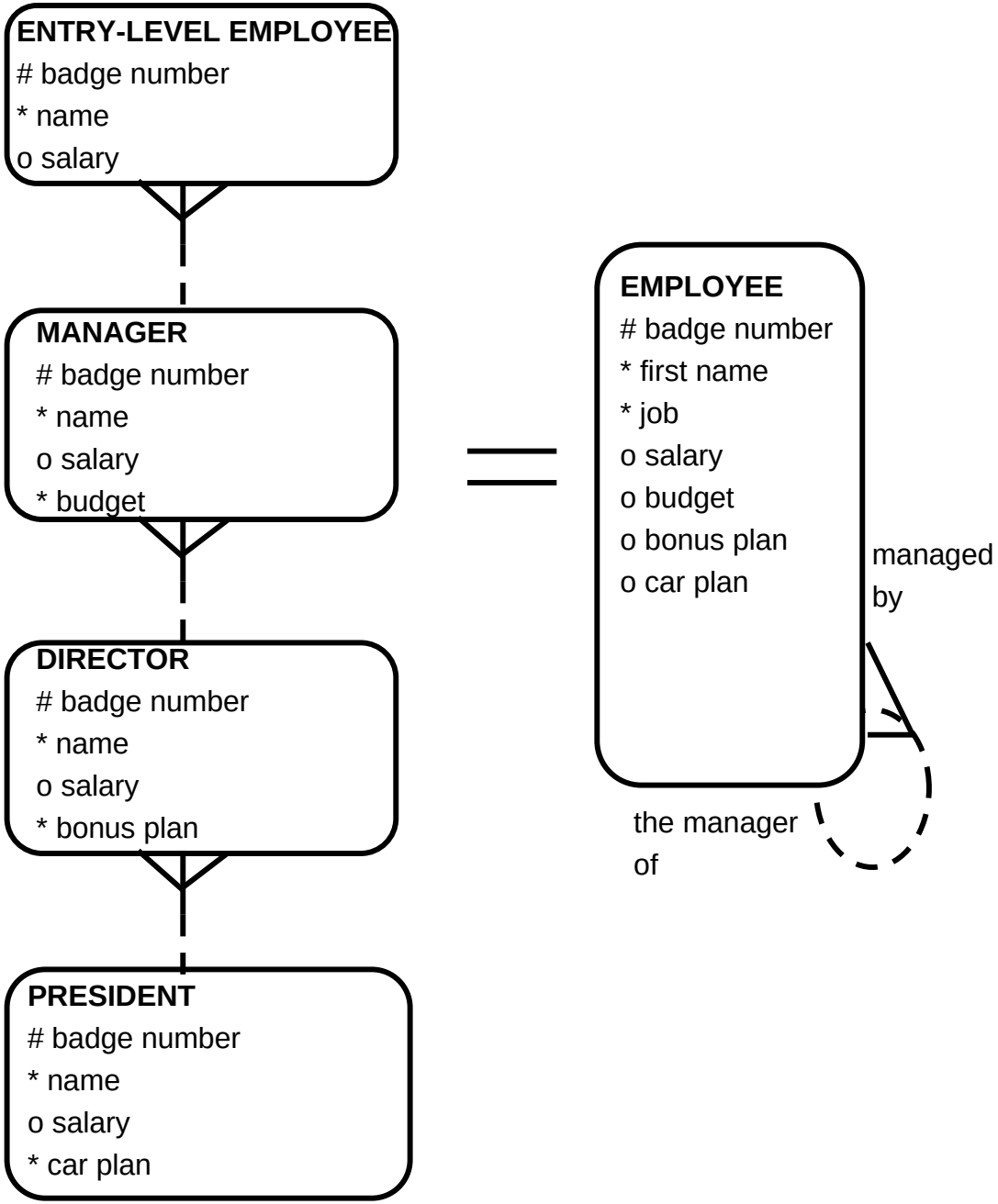
Both of these models represent all employees.

The one on the left is a hierarchical structure. The one on the right uses a recursive relationship.

Which one do you think is better?



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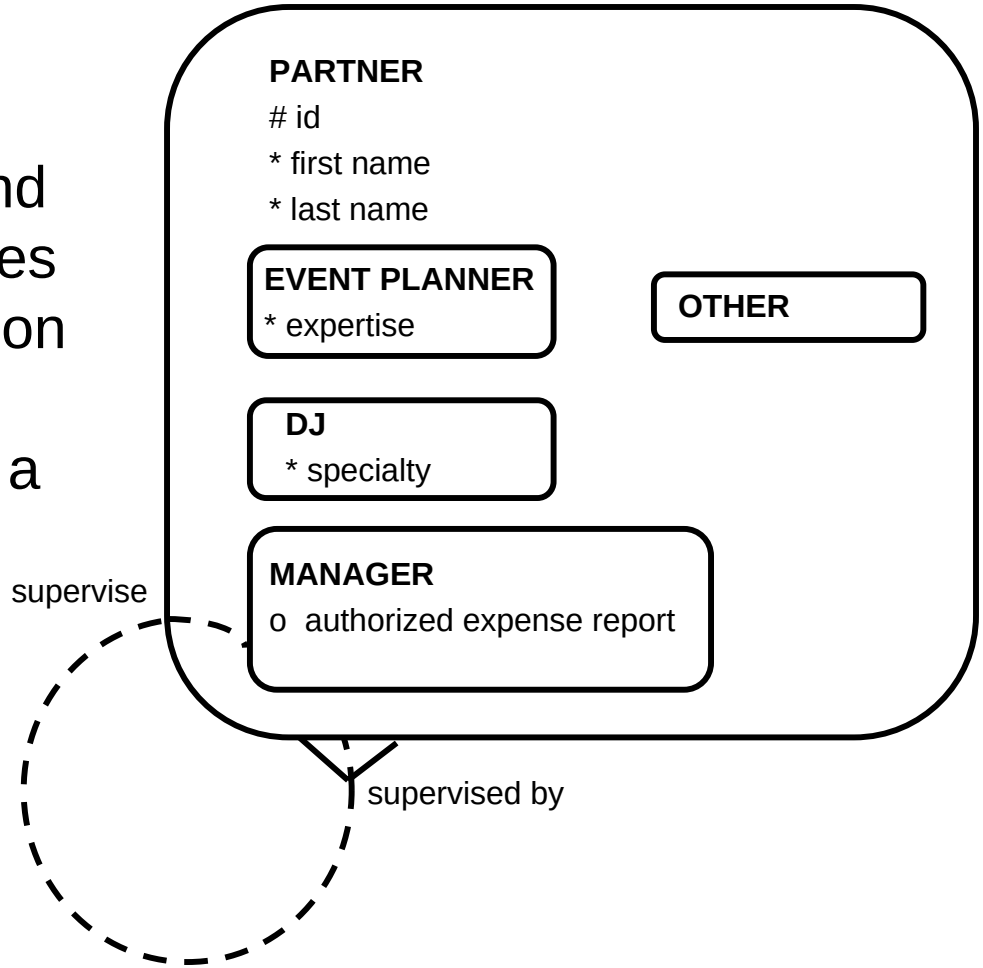
Tell Me / Show Me

In the DJ model, the project manager has overall responsibility for an event and manages the other employees (event planner, DJ) working on the event. We chose to represent the hierarchy with a recursive relationship.



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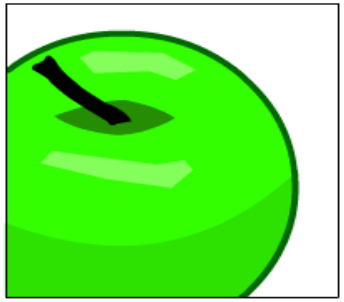
Terminology

Key terms used in this lesson include:

Hierarchal relationship

Recursive relationship



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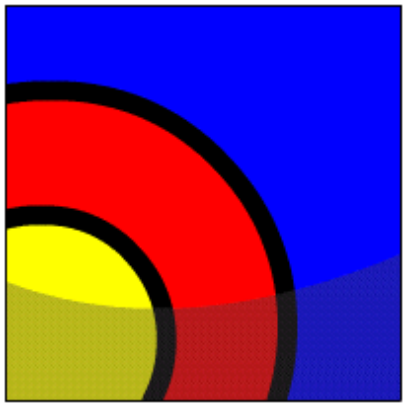
Summary

In this lesson, you have learned how to:



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Summary

Practice Guide

The link for the lesson practice guide can be found in the course outline.

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