

CSC3170 Individual Assignment #1
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An E-R Model for a Real Estate Firm

1. Background:

We need to create E-R diagram for firm's sales offices in several states.

Sales office: each sales office has number as identifier and other attribute is name.

Employee: Attributes of employee include identifier and name.

Property: Attributes of property include property ID and location. Components of location include address, city, state and zip code.

Owner: Attributes of owners are Owner ID and name.

The sales office has location and specific Number for identifying. This is the places the employees manage.

The employee has attributes of name and identifier for identifying. This is the workers to be assigned to sales offices.

The property has identifier for identifying and location break into address, city, state, and zipcode. This is the property to be sold.

The owner has identifier and name. This is the ones to buy the properties.

2. Description of E-R relationship between different entities:

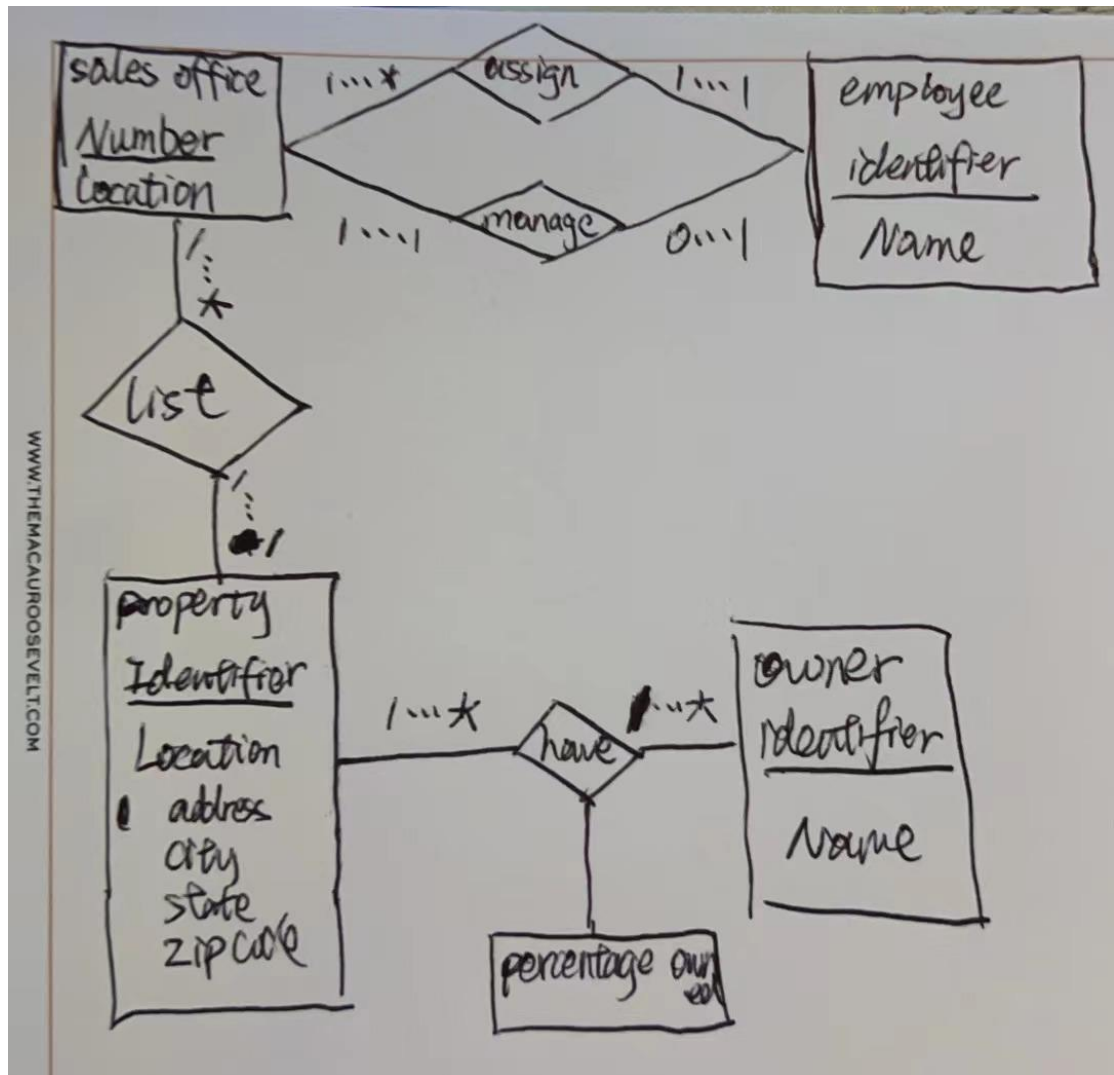
Assigned: This is the relationship between Employee and Sales Office. Every employee must be assigned to one sales office, and each sales office can have one or more employees. The sales office will assign 1 to infinity employees, and every employee will be assigned to one sales office.

Manages: This is the relationship between Employee and Sales Office. Each sales office is managed by one employee, and an employee can only manage the sales office to which they are assigned. The employee will manage only one sales office, but the sales office may not need this employee to manage.

Listed: This is the relationship between Property and Sales Office. Each property must be listed with one sales office, and each sales office can have any number of properties listed. The sales office will list 1 to infinity properties and every property will be listed by only one sales office.

Owned : This is the relationship between Property and Owner. Each property can have one or more owners, and an owner can own one or more properties. The attribute of this relationship is Percent Owned. The property will be owned by 1 to infinity owners, but the owner can also have 1 to infinity properties.

3. E-R diagram:



4. Concluding remarks of the report:

This report concludes the relationship of sales office, employees, properties, and owners using E-R diagram. The details of these four entities are shown in background. Moreover, the report uses four relationships to describe the interactions of the four entities. This is shown in the Description part.

This E-R report can tell us the database image of this program. It validates the possibility of creating a database for this project. And gave a relatively accurate and effective model, which is useful in the future research.