CIS430-Lab Assignment 2

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Object: Identify relationships between two entities to create a company database scheme

Relationships identified:

1. EMPLOYEE HAS DEPENDENTTS, not every employee has dependent, but every dependent should belong to an employee, so the participation of employee is partial whereas that of dependent is total. The cardinality should be 1: N, one employee may have several dependents.
2. EMPLOYEE WORKS ON PROJECT, not all employee have a project, but a project must be done by a employee or a group, so the participation for employee is partial, that of project is total. The cardinality is M : N, a employee could work on several projects and a projects could be done by several employee.
3. EMPLOYEE WORKS FOR DEPARTMENT, each employee belongs a department and a department can have more than one employee, so the cardinality is N : 1. Both participations are total.
4. EMPLOYEE MANAGES DEPARTMENT, a manager manages a department, so the cardinality is 1 : 1. Since not all employees are managers, the employee participation is partial. A department must be managed by a manager, so department participation is total.
5. DEPARTMENT CONTROLS PROJECTS. One department could have several projects, so the cardinality is 1 : N. Not all department necessarily have a project, so the participation of department is partial, that of project is total.

