

# Company and Departments (Composition)

**Class: Employee**

**- Attributes:**

- Name : string
- EmployeeID : string

**- Methods:**

- Work()
- DisplayInfo()

**Class: Department**

**- Attributes:**

- Name : string
- Employees : List<Employee>

**- Methods:**

- AddEmployee(emp : Employee)
- RemoveEmployee(emp : Employee)
- DisplayEmployees()

**Class: Company**

**- Attributes:**

- Name : string
- Departments : List<Department> // Composition

**- Methods:**

- AddDepartment(dep : Department)
- RemoveDepartment(dep : Department)
- DisplayDepartments()

**Relationship:**

- Composition: Company contains Departments → Departments cannot exist without Company
- Composition: Department contains Employees → Employees cannot exist without Department