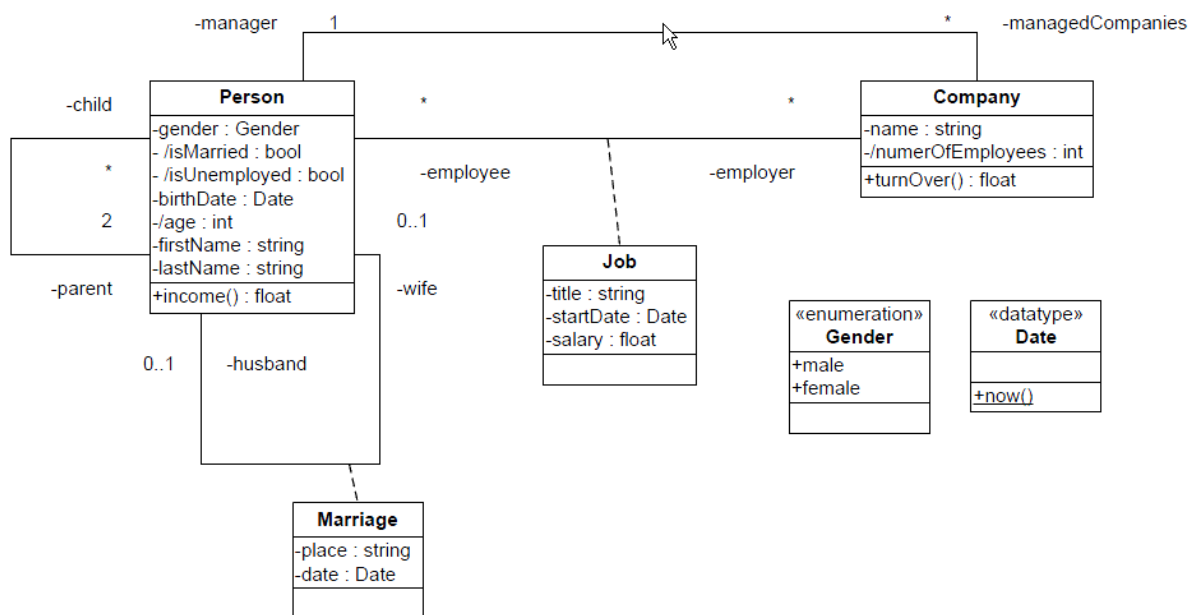


Object Oriented Analysis

Lecture 4: Object Constraint Language (OCL)

Nga Nguyen

We will study the following UML class diagram from the OCL 2.4 specification (<https://www.omg.org/spec/OCL/2.4/PDF>):



Write the following constraints with OCL:

1. Initially, the salary of an employee is 1000 euros.
2. The manager of a company must be over 40 years old.
3. The age of an individual is a function of the present moment and his date of birth.
4. If the turnover of a company exceeds 1 million euros, it must have more than 10 employees.
5. You cannot start working before your date of birth.
6. A man is married to a woman and a woman with a man.
7. To be married, you must be over 18 years old.
8. You cannot start working on your wedding day.
9. A person cannot be employed by more than 2 companies.
10. All employees of a company must be over 18 years old.
11. The total number of employees in a company is equal to the number of employees plus the manager.
12. The income of a major person is the sum of the salary of the jobs that they occupy.
13. A company must have employees over 50 years old.
14. If a person has two parents, one is a woman and the other is a man.
15. All children of one person have this person as parent and vice versa.