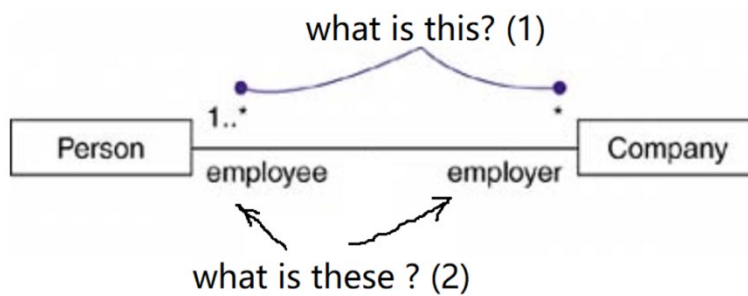


2019 级软件 UML 月考（1） 2019.3.31

一、 Briefly explain following concepts or questions (5 points each, 50)

- 1、 Please write out full name of UML?
- 2、 why UML provide “Stereotype” mechanism for modeling ?
- 3、 how to find actor?
- 4、 By the diagram , (1) is called (); (2) is called ()

Text Fig5-6



- 5、 Why Visual Modeling is a Good Thing?
- 6、 what is wrong with this model(见图 1)?

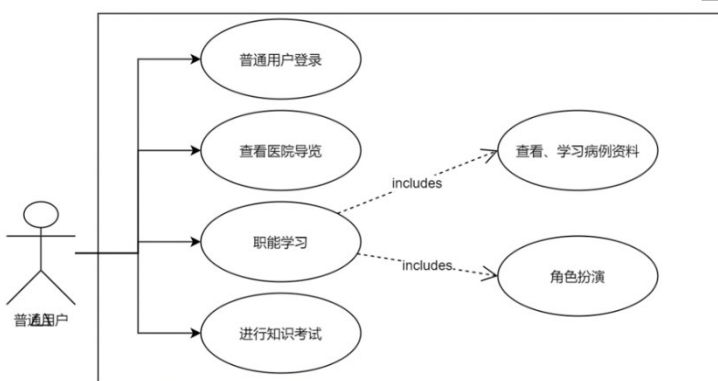


图 1

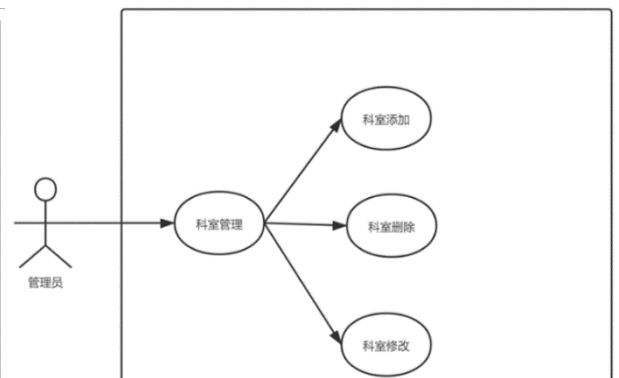


图 2

- 7、 what is wrong with this model （见图 2） ?
- 8、 Explain “multiple inheritance can often be replaced with aggregation.”
- 9、 why do we need to find Actors as the first step during analysis?
- 10、 what is Polymorphism?

二、 Translate following text into Chinese . (10 points)

A use case may have variants. In all interesting systems, you'll find use cases that are specialized versions of other use cases, use cases that are included as parts of other use cases, and use cases that extend the behavior of other core use cases. You can factor the common, reusable behavior of a set of use cases by organizing them according to these three kinds of relationships.

A use case carries out some tangible amount of work. From the perspective of a given actor, a use case does something that's of value to an actor, such as calculate a result, generate a new object, or change the state of another object. (see Eng Text P271)

三、 According to following problem description Please

- 1) find Actors (10 分) ,
- 2) find out usecases, and draw them in a usecase diagram (20 分)
- 3) Describe any one usecase in detail, including at lease one alternative event follow(10 分).

An Exhibition(展览会) requires a system that will enable exhibition staff to keep track of guided tours of the Exhibition hall. When a party of visitors arrives, a staff member must be able to record the date, start time and number of visitors undertaking the tour. Also, a staff member must be able to assign a guide to the tour, from available tour guides (i.e., those not currently conducting a tour or performing some other duty); the assigned guide will be notified of the assignment.

During a tour, its guide must be able to record special incidents that might occur, such as a visitor becoming ill. Each such incident will be related to the tour on which it occurred and will include a description and a time. Incident reports must be communicated to the Exhibition's Safety Office.