

Use Case Examples

Example 1: Courseware System Description

- ▶ The organization offers courses. Each course is made up of a set of topics. Tutors in the organization are assigned courses to teach according to the area that they specialize in and their availability. The organization publishes and maintains a calendar of the different courses and the assigns tutors every year for the students. There is a group of course administrators in the organization who manage tutors, manage the courses including course content, assigning courses to tutors, and defining the course schedule.



Example 1 cont.

- ▶ Draw a use case diagram for Courseware System. , without using extends or includes use cases...



Example 1 cont.

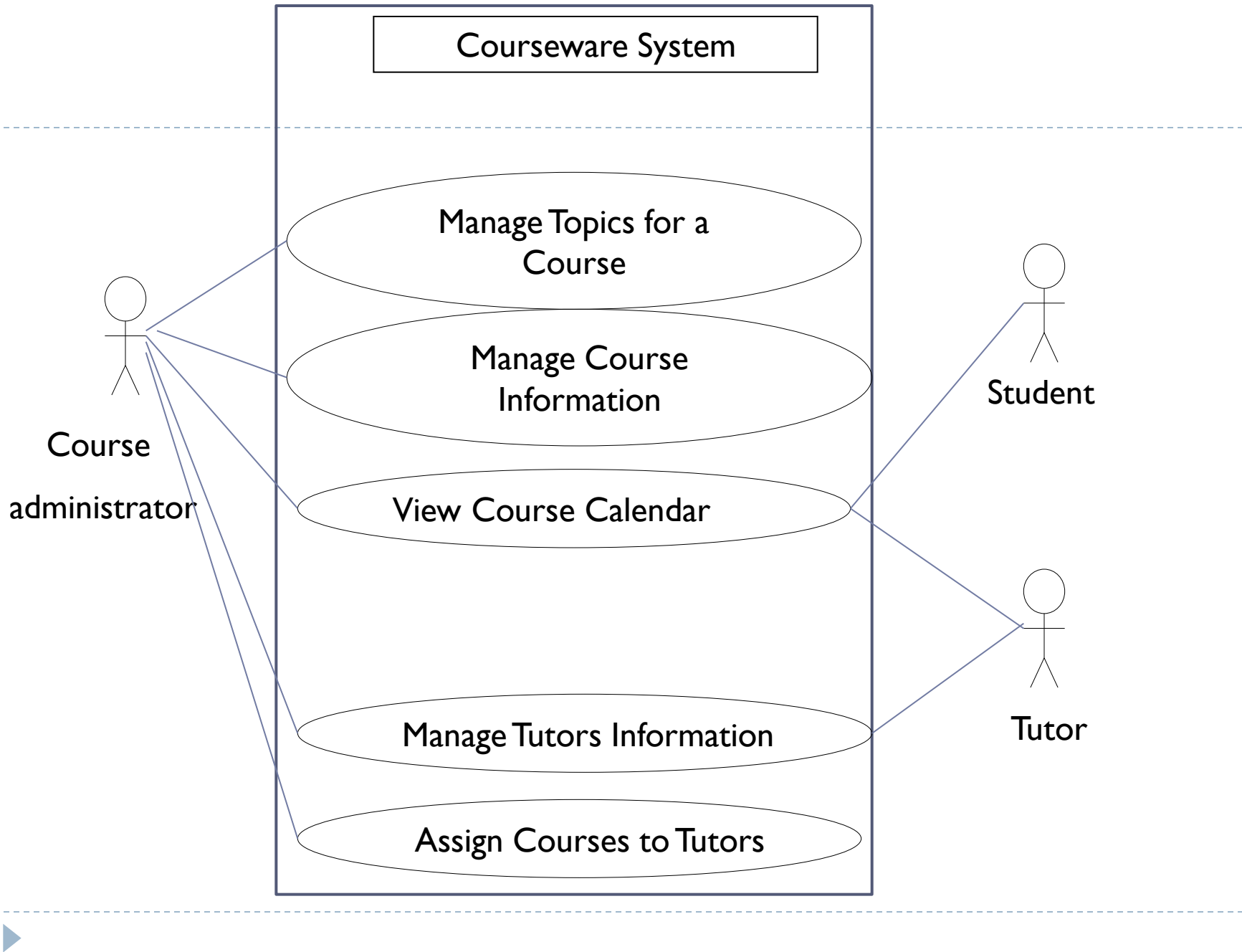
- ▶ **Actors:?**

- ▶ Tutor, Student, Course Administrator

- ▶ **Use Cases ?**

- ▶ **Manage courses:** Manage topics for a course, and Manage course information
- ▶ **Manage tutors:** View course calendar, Manage tutor information, and Assign courses to tutors





Example2

- ▶ Write an expanded use case “ATM withdraw cash”; which details the withdraw cash process from an ATM. Assume that:
 - ▶ The user will choose only the transaction type withdraw
 - ▶ The user account covers the required cash
 - ▶ ATM is ready for this service



Example2 cont.

- ▶ Use Case: ATM withdraw cash
 - ▶ Actor: user
 - ▶ Purpose: To withdraw some cash from user's bank account
 - ▶ Overview (Success scenario):
 - ▶ The use case starts when the user arrives at the ATM and enters his/her identification. The system requests the user password. The system validates the password. If the validation succeeded, the user can choose the withdraw operation. On completion, the user leaves with his/her cash and receipt.
 - ▶ Type: primary
-



Example2 cont.

Actor	System response
<p>1. This use case starts when the user arrives at the ATM and enters his/her identification</p> <p>3. User enters his password</p> <p>5. User chooses withdraw transaction</p> <p>7. User enters the required amount</p> <p>9. Chose to confirm the receipt operation</p> <p>11. the user leaves with his/her cash and receipt</p>	<p>2. Validate the user identification. If valid, request password</p> <p>4. Verifies the authorizations. If authorized, asks for transaction type</p> <p>6. Display the cash amounts choices</p> <p>8. Asks for receipt</p> <p>10. Verifies the requested amount with the account limit and daily limit. If receipt is requested, print the receipt</p>



Example2 cont.

Alternative:

- ▶ Line 2: if identification invalid, operation cancelled
- ▶ Line 4: If password not authorized, error message is displayed and give 2 more trials

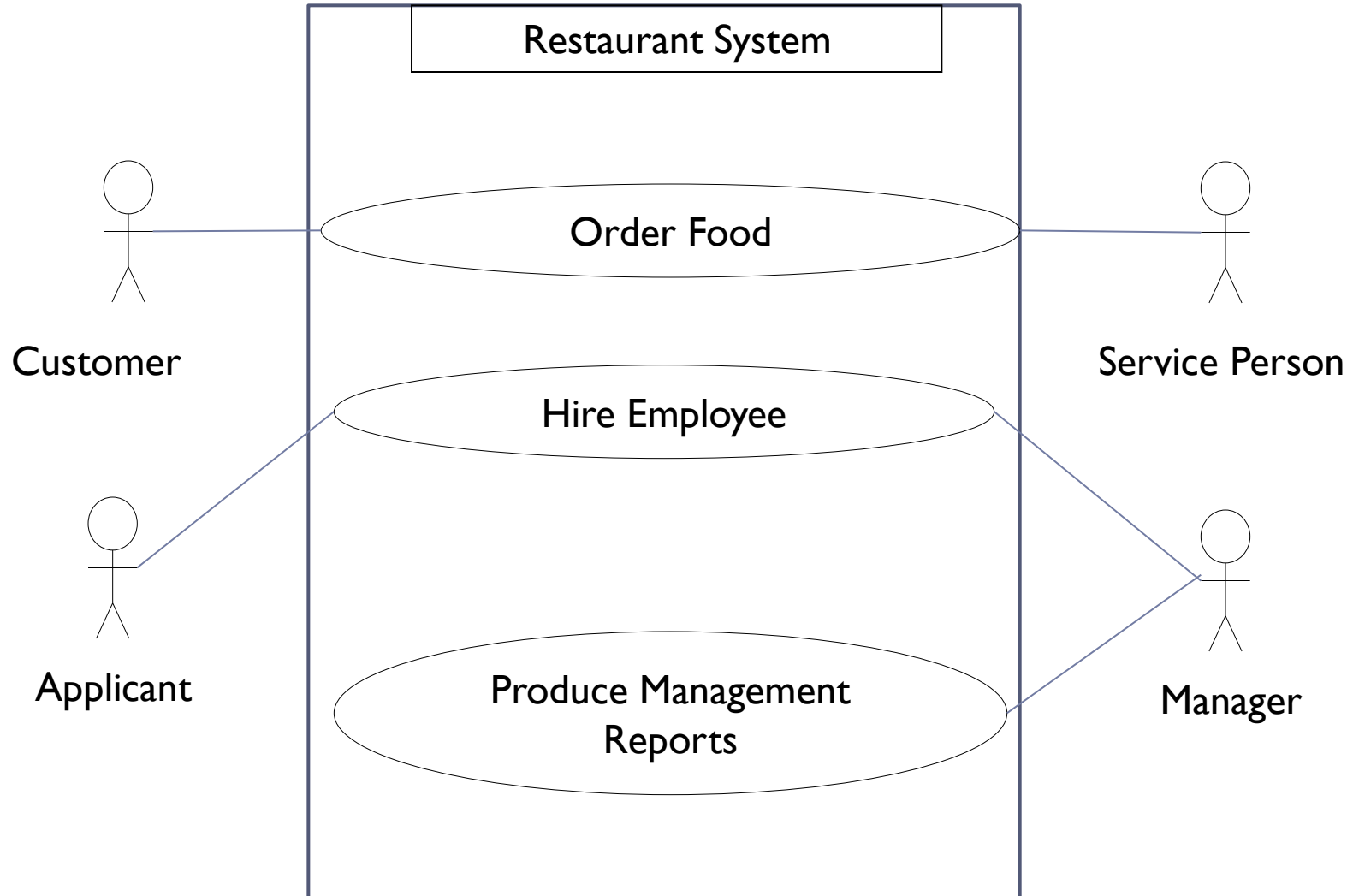


Example3

- ▶ Draw a use case diagram for restaurant(put three use cases)



Example3 cont.



Example 4

- ▶ An online shopping portal allows their customers to browse or buy different items. A customer may buy item(s) or just view the items and logout. If the customer decides to purchase an item, he/she selects the item and adds it to the shopping cart. Once the customer finishes selecting the item(s) the cart can be viewed. The customer can edit the final cart then submit the final cart for payment, or logout from the site without buying the items. The site's administrator can add or update different items in the system, manage the registration of new customer, and ensure the authorization of already registered customers.
- ▶ Draw the use case diagram for the online shopping system, without using extends or includes use cases...



Example 4 cont.

- ▶ An online shopping portal allows their customers to **browse** or **buy different items**. A customer may **buy item(s)** or just **view** the items and **logout**. If the customer decides to purchase an item, he/she selects the item and **adds it to the shopping cart**. Once the customer finishes selecting the item(s) **the cart can be viewed**. The customer **can edit the final cart** then **submit the final cart for payment**, or **logout** from the site without buying the items. The site's administrator can **add** or **update different items** in the system, **manage the registration of new customer**, and ensure the **authorization of already registered customers**.
- ▶ Draw the use case diagram for the online shopping system, without using extends or includes use cases...

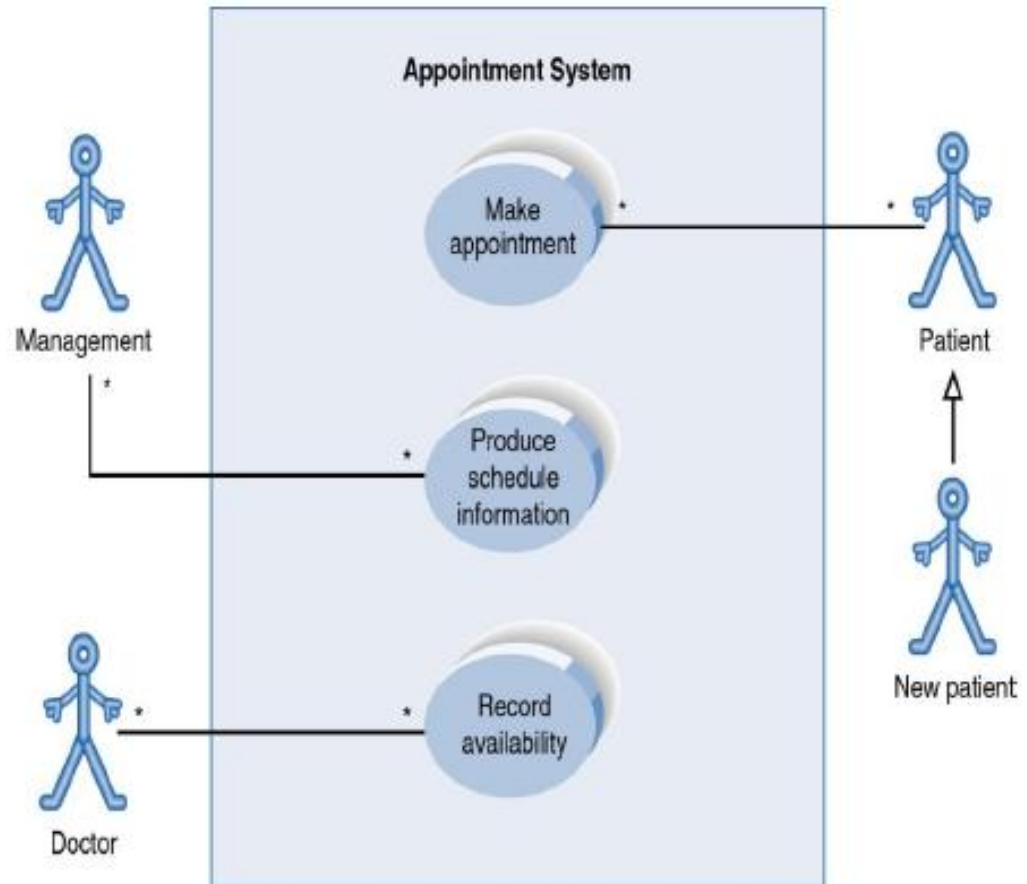


Example 4 cont.



Example 5

- ▶ Do the following operations on the use case diagram stated below:

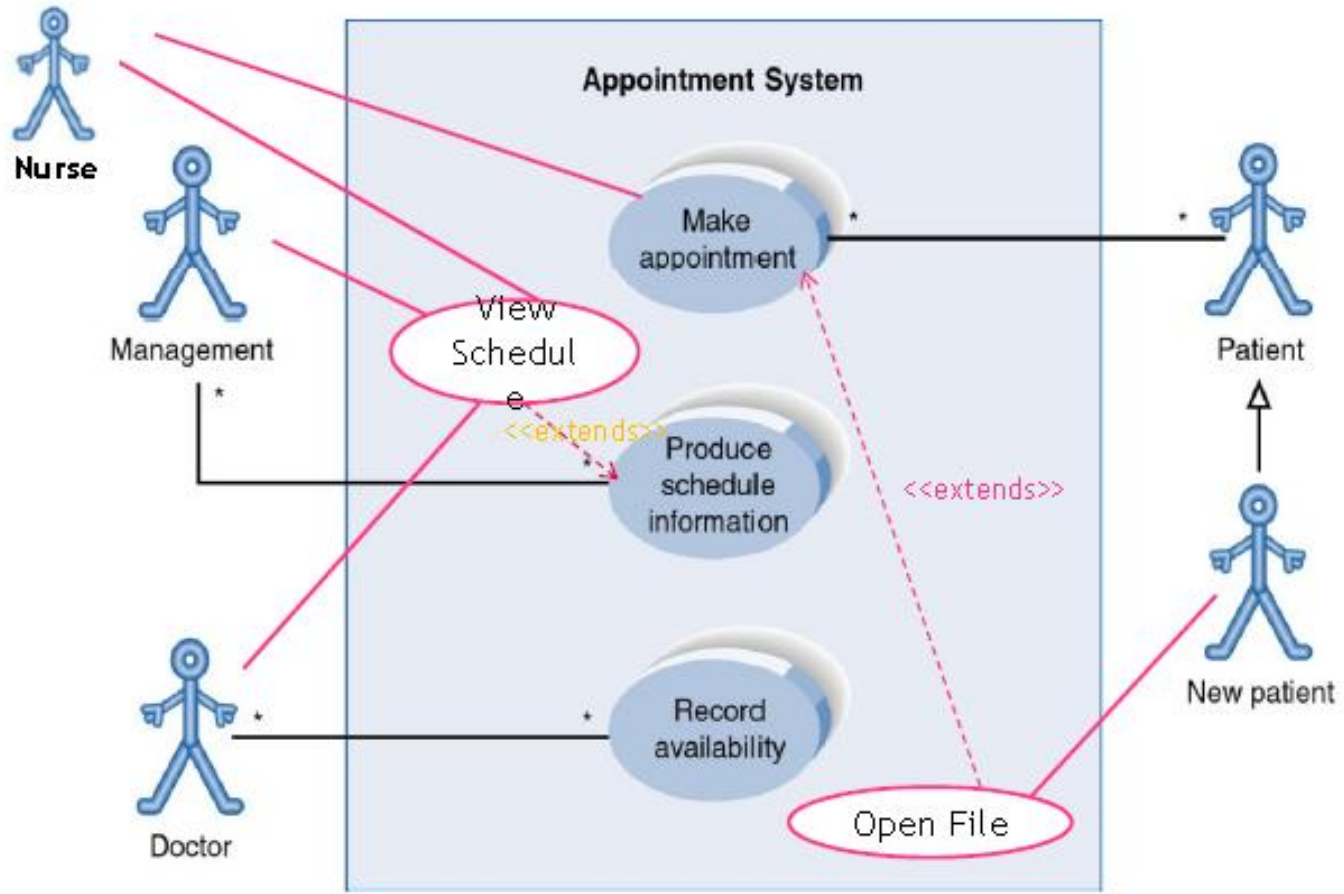


Example 5 cont.

1) Update the use case diagram such that a new patient can open a file. Also nurses help in making appointments and they can view a schedule. Also, Management and doctors can view the schedule. Add any other appropriate missing things.



Example 5 cont.



Example 5 cont.

2) Write a high level format for make appointment use case.

- ▶ Use case: Make appointment
- ▶ Actors: Patient (initiator), Nurses
- ▶ Description: This use case begins when the patient ask the nurses to reserve an appointments with a certain doctor and date, and produce an appointment slip.



Example 5 cont.

3) Write typical course of events for make appointment use case.



Example 5 cont.

Actor action	System response
1. This use-case begins when the patient come to the nurse or call her to ask for an appointment.	
2. The nurse request the patient id from the patient and enter it	3. System pulls up patient file
4. Nurse ask the patient for doctor name and the department and enter it to the system	5. System returns all possible appointment dates.
6. Nurse tell the patient about all the possibilities and get from him/her the most desired one, and enter it to the system to reserve it.	7. System reserves app
8. The nurse request to print an appointment slip	9. system prints app slip
10. The patient gets the slip and go.	

Alternative:

Line 1. If patient was a new one, then call open file use-case.

Line 2. If patient forgot ID, provide name or Phone number

Line 2. If the ID was wrong, the system should display a message to indicate that.