



Use Case (In Class Activities)



Plan

- Answer questions individually, and then evaluate the answers in teams of two.
- Each person should maintain a report
- Check your answers with the professor.
- If you do not finish all exercises during the class, you should finish at home.



WebOrder Case Study

A small start-up company wants to market a web-based service to restaurants that will automate order-taking for customers with devices capable of using wireless Internet connections.

The product is called **WebOrder**. WebOrder will present customers with menus on their personal digital assistants or cell phones and accept their orders. It may offer additional features as well.

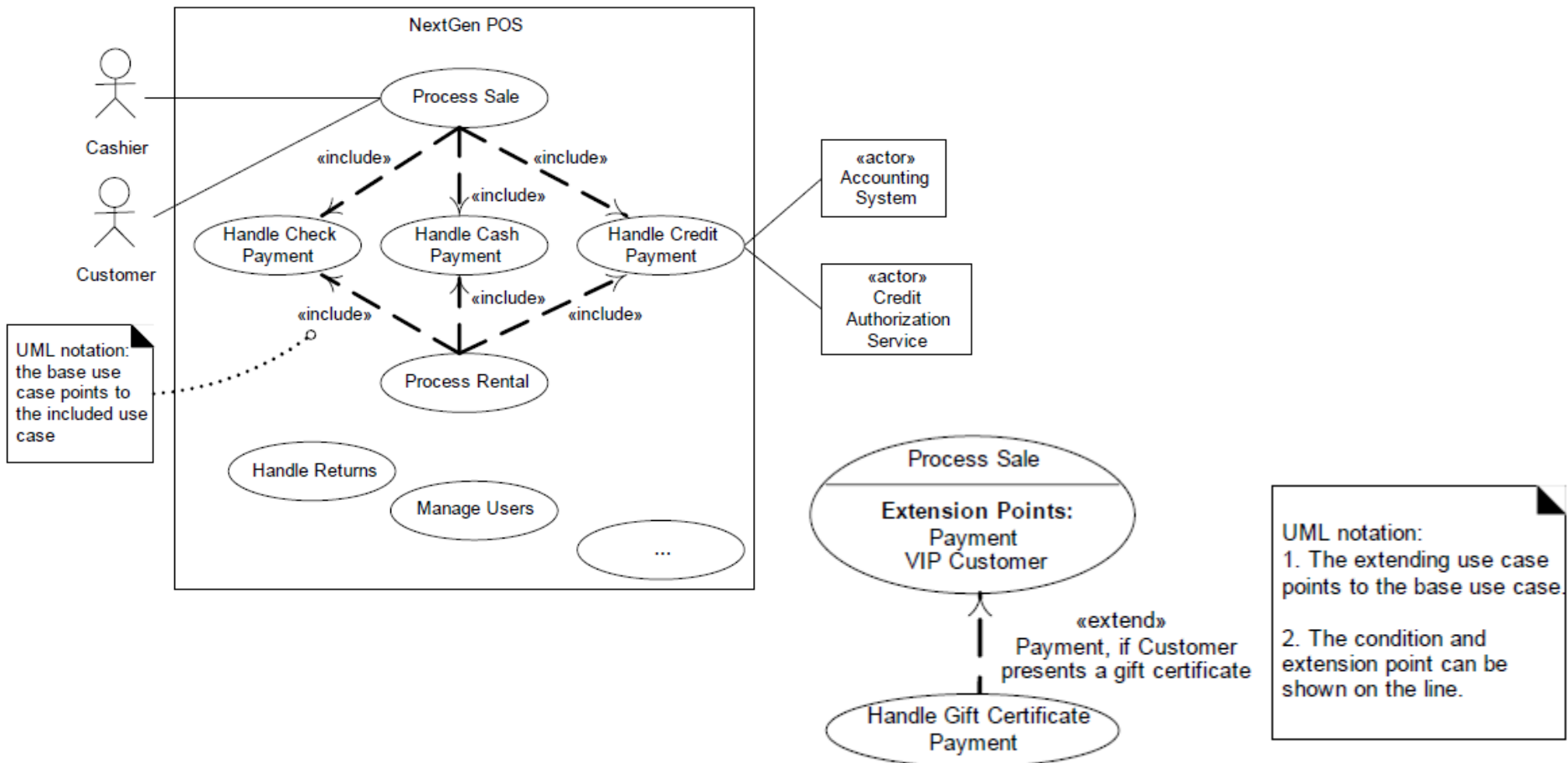


UML Use Case Diagram

- Draft a use case diagram for WebOrder.
- Your use case diagram might have use cases such as (but not limited to!)
 - Place an Order, List Orders, and Send Message to Server, Process Sales, ...

Use Cases – Include vs Extend

- This is simply refactoring and linking text to avoid duplication by using subfunctions. Two relationship types: Include and Extend.





Include Relationship

Process Sale

Main Success Scenario:

1. Customer arrives at a POS checkout with goods and/or services to purchase.
7. Customer pays and System handles payment.

Extensions:

- 7b. Paying by credit: Include *Handle Credit Payment*. 7c. Paying by check: Include *Handle Check Payment*.

UC7: Process Rental

Extensions:

- 6b. Paying by credit: Include *Handle Credit Payment*.

UC12: Handle Credit Payment

Level: Subfunction Main Success Scenario:

1. Customer enters their credit account information.
2. System sends payment authorization request to an external Payment Authorization Service System, and requests payment approval.



Extend Relationship

UC1: Process Sale (the base use case)

Extension Points: *VIP Customer*, step 1 . *Payment*, step 7. Main Success Scenario:

1 . Customer arrives at a POS checkout with goods and/or services to purchase.

...

7. Customer pays and System handles payment.

...

UC15: Handle Gift Certificate Payment (the extending use case)

...

Trigger: Customer wants to pay with gift certificate.

Extension Points: *Payment in Process Sale*. Level:

Subfunction Main Success Scenario:

1 . Customer gives gift certificate to Cashier. 2.

Cashier enters gift certificate ID.

...



Include vs Extend

- Relate Use Cases to Each Other
 - Modify your Use Case Diagram by adding include and extend associations.



Fully Dressed Use Case

- Choose one of the use cases to write a use case description for.
 - Your choice should not be so simple that it has a trivial description.
 - Include Success and Alternate Scenarios.
- Show the instructor your use case diagram and your chosen use case before proceeding with the use case fully dressed description!
- Verify Fully Dressed Use Case Checklist.



Fully Dressed Use Case Checklist

Use Case Section	Comment
Use Case Name	Start with a verb.
Scope	The system under design.
Level	"user-goal" or "subfunction"
Primary Actor	Calls on the system to deliver its services.
Stakeholders and Interests	Who cares about this use case, and what do they want?
Preconditions	What must be true on start, <i>and</i> worth telling the reader?
Success Guarantee	What must be true on successful completion, <i>and</i> worth telling the reader.
Main Success Scenario	A typical, unconditional happy path scenario of success.
Extensions	Alternate scenarios of success or failure.
Special Requirements	Related non-functional requirements.
Technology and Data Variations List	Varying I/O methods and data formats.
Frequency of Occurrence	Influences investigation, testing, and timing of implementation.
Miscellaneous	Such as open issues.