

Use Case Modelling II

CSIT883 System Analysis and Project Management



UNIVERSITY
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AUSTRALIA



Outline

Fully Developed Use Case Description

Activity Diagram

System Sequence Diagram

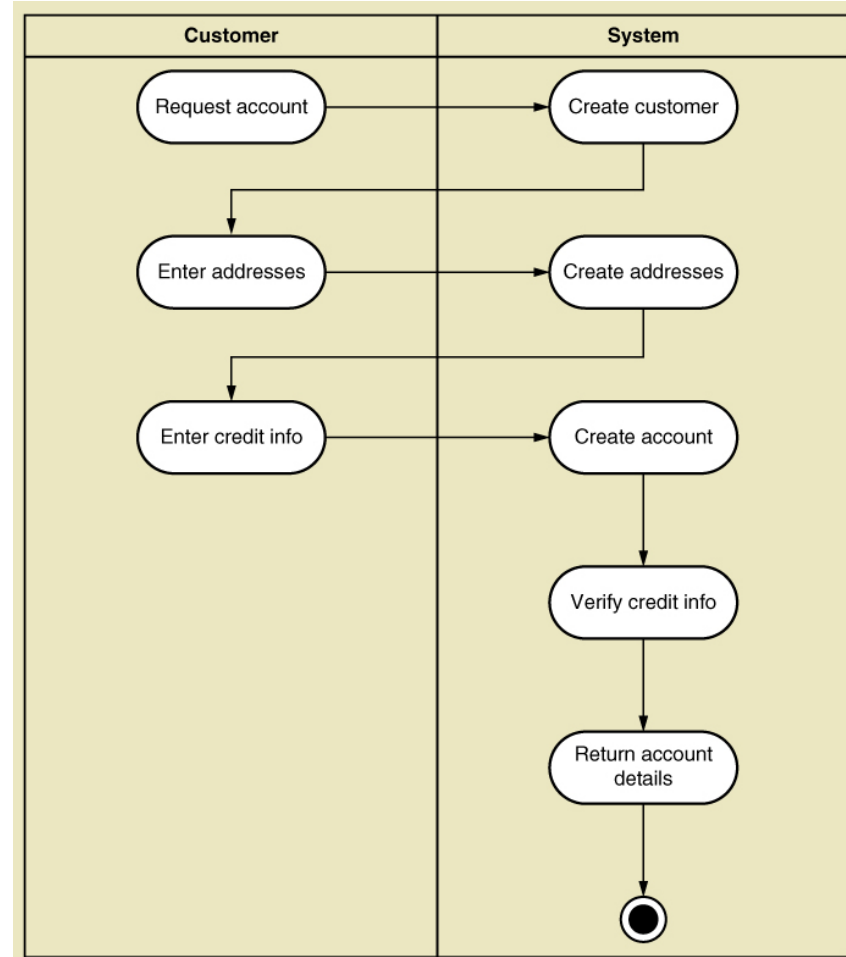
CRUD Analysis



UML Activity Diagram for Use Case

Create Customer Account

Note: this shows flow of activities only

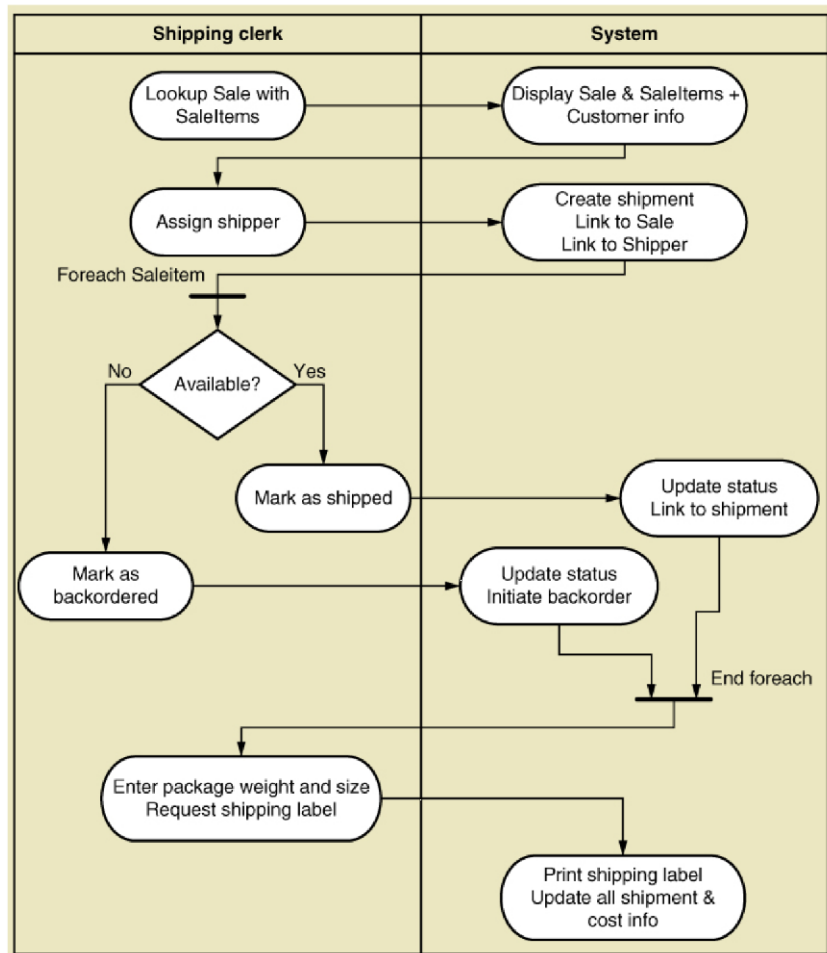




Activity Diagram for *Ship Items* Use Case

Note:

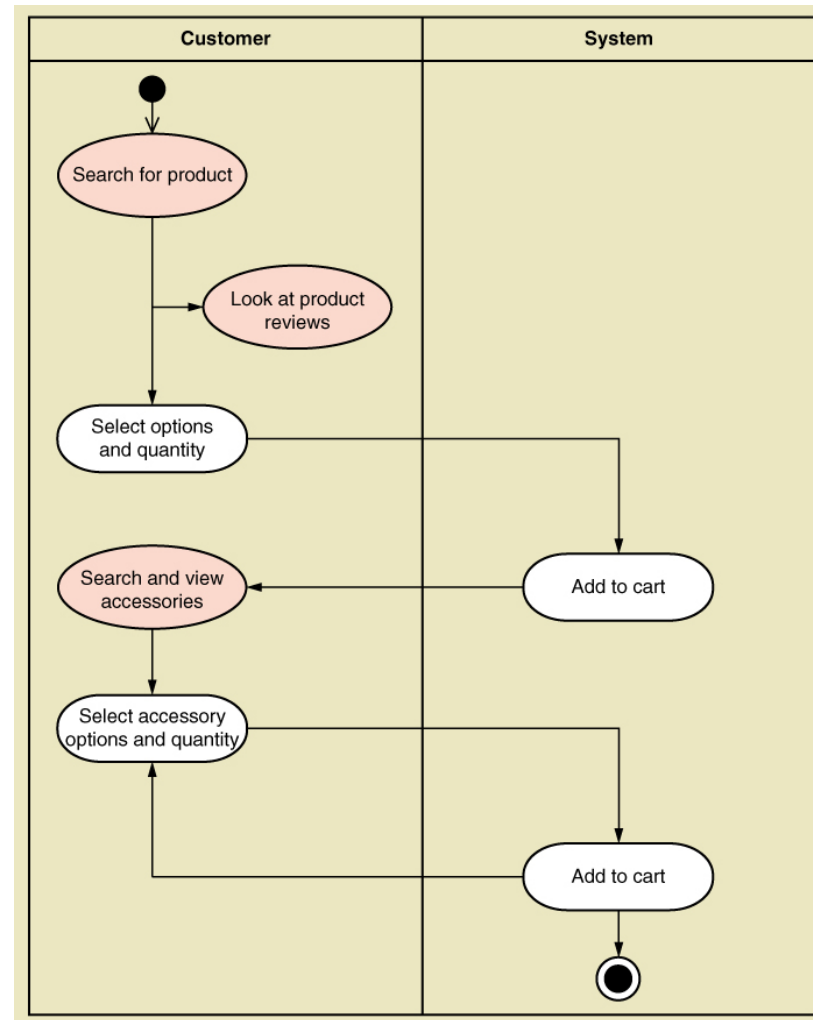
- Synchronization bar for loop
- Decision diamond





UML Activity Diagram for Use Case *Fill Shopping Cart*

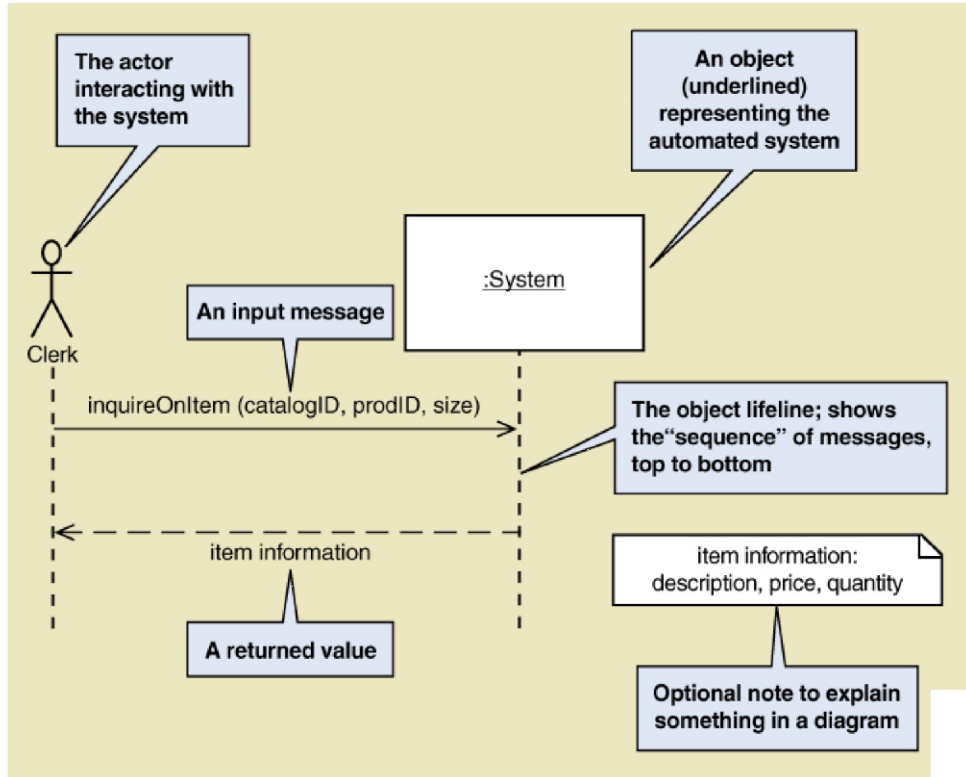
Note: this shows use case
with <<includes>>
relationship





System Sequence Diagram (SSD) Notation

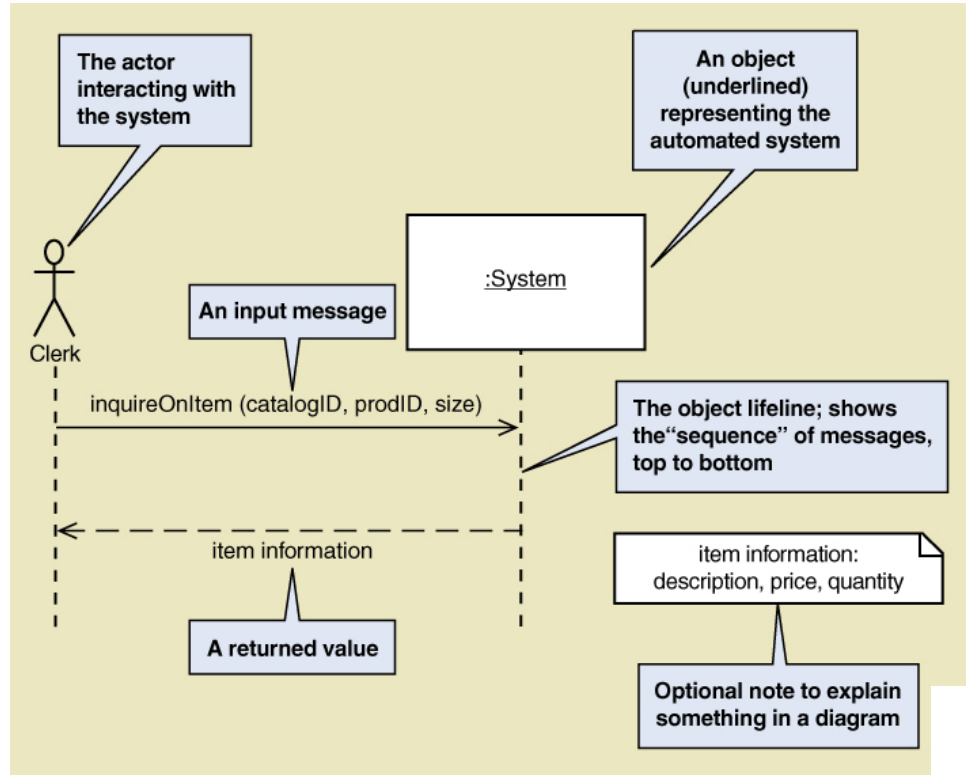
- **System sequence diagram** – a diagram showing the sequence of messages between an actor and the automated part of the system during a use case or scenario





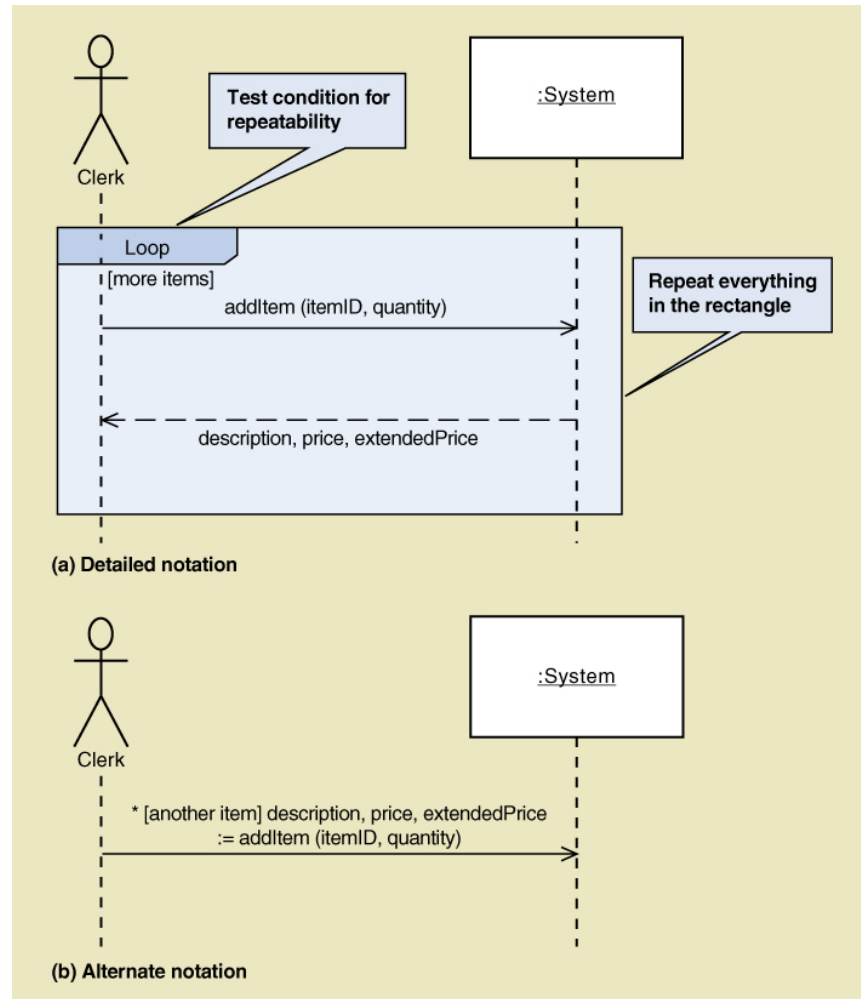
System Sequence Diagram (SSD) Notation

- **System sequence diagram** – a diagram showing the sequence of messages between an actor and the automated part of the system during a use case or scenario





SSD Message Examples with Loop Frame





SSD Message Examples with Loop Frame

- **[true/false condition] return-value := message-name (parameter-list)**
 - An asterisk (*) indicates repeating or looping of the message
 - Brackets [] indicate a true/false condition. This is a test for that message only. If it evaluates to true, the message is sent. If it evaluates to false, the message isn't sent.
 - Message-name is the description of the requested service written as a verb-noun.
 - Parameter-list (with parentheses on initiating messages and without parentheses on return messages) shows the data that are passed with the message.
 - Return-value on the same line as the message (requires :=) is used to describe data being returned from the destination object to the source object in response to the message.



SSD Message Examples

(a) Opt Frame (optional)

(b) Alt Frame (if-else)

