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**S E S S I O N**

**14**

**OBJECT-  
ORIENTED DESIGN  
AND MODELING  
USING THE UML**

## Sesi 14:

# Perancangan dan Pemodelan Berorientasi Obyek

### **Referensi:**

- Whitten, bab 18
- Perancangan Berorientasi Obyek
- Proses Perancangan Obyek

# Object-Oriented Design

**Object-oriented design (OOD)** – an approach used to specify the software solution in terms of collaborating objects, their attributes, and their methods.

- Continuation of object-oriented analysis

# The Process of Object-Oriented Design

1. Refining the use case model to reflect the implementation environment.
2. Modeling object interactions and behavior that support the use case scenario.
3. Updating the object model to reflect the implementation environment.

# Refining The Use Case Model

**Step 1:** Transforming the “Analysis” Use Cases to “Design” Use Cases

**Step 2:** Updating the Use Case Model Diagram and Other Documentation to Reflect any New Use Cases

# Design Use Case

<b>Member Services System</b>	
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<b>Date:</b> <u>11/21/02</u>	
<b>Version:</b> <u>1.00</u>	
<b>Use Case Name:</b>	Place New Order
<b>Use Case ID:</b>	MSS-SUC002.00
<b>Priority:</b>	High
<b>Source:</b>	Requirement — MSS-R1.00 Requirements Use Case — MSS-BUC002.00
<b>Primary Business Actor:</b>	Club Member (Alias — Active Member, Member)
<b>Primary System Actor:</b>	Club Member (Alias — Active Member, Member)
<b>Other Participating Actors:</b>	<ul style="list-style-type: none"> <li>• Warehouse (Alias — Distribution Center) (external receiver)</li> <li>• Accounts Receivable (external server)</li> </ul>
<b>Other Interested Stakeholders:</b>	<ul style="list-style-type: none"> <li>• Marketing — Interested in sales activity in order to plan new promotions.</li> <li>• Procurement — Interested in sales activity in order to replenish inventory.</li> <li>• Management — Interested in order activity in order to evaluate company performance and customer (member) satisfaction.</li> </ul>
<b>Description:</b>	This use case describes the event of a Club member submitting a new order for SoundStage products via the World Wide Web. The member selects the items he or she wishes to purchase. Once the member has completed shopping, the member's demographic information as well as account standing will be validated. Once the products are verified as being in stock, a packing order is sent to the distribution center for it to prepare the shipment. For any product not in stock, a back order is created. On completion, the member will be sent an order confirmation.
<b>Precondition:</b>	The individual must be a registered user of the system. The member must have logged in to the system, and the member home page is being displayed.
<b>Trigger:</b>	This use case is initiated when the member selects the option to enter a new order.

**① Use Case Type**

**Business Requirements:**

**System Analysis:**

**System Design:**