Object Interaction – Sequence Diagrams

Based on Chapter 9
Bennett, McRobb and Farmer

Object Oriented Systems Analysis and Design Using UML

4th Edition, McGraw Hill, 2010

In This Lecture You Will Learn:

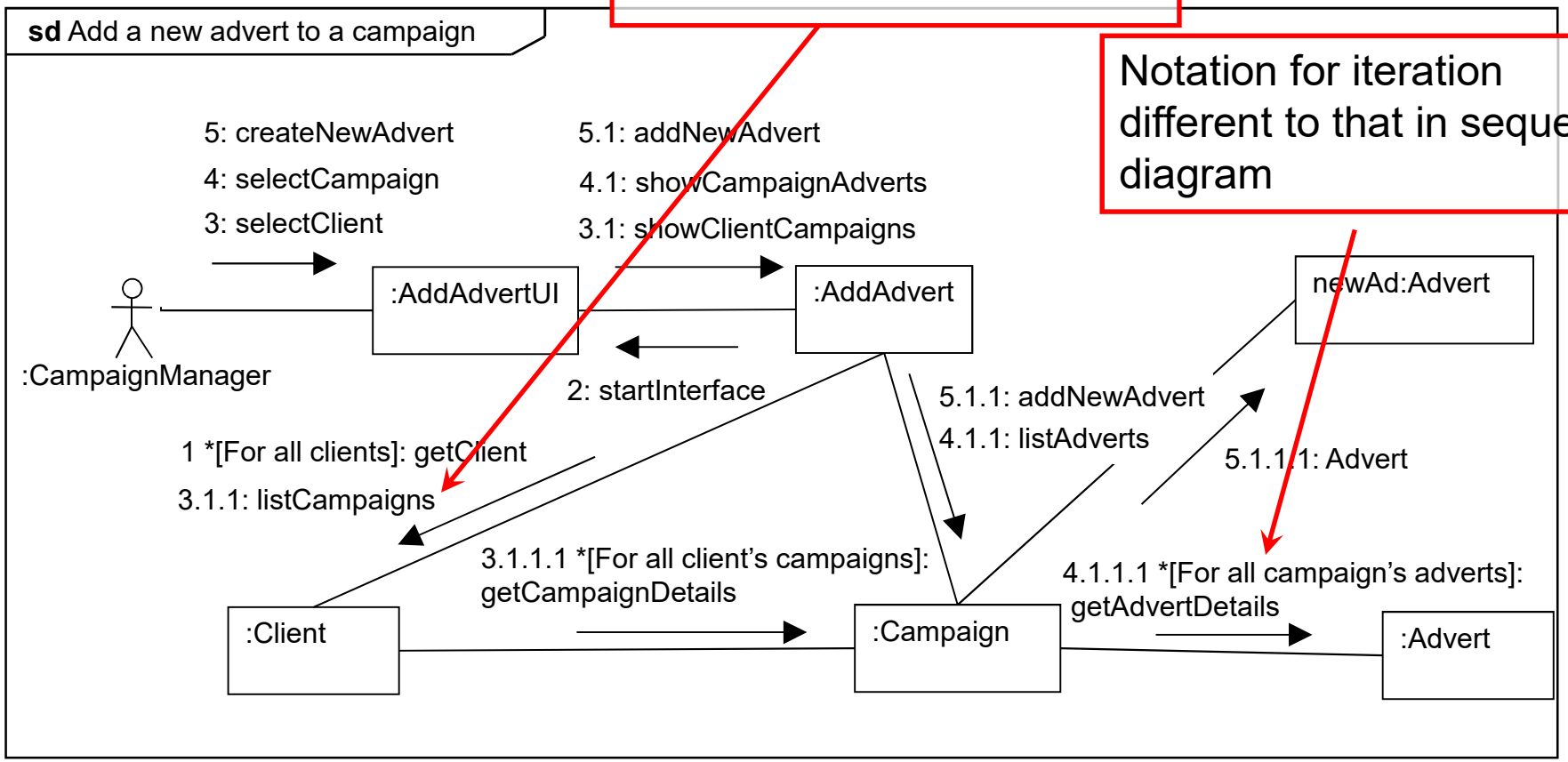
- how to model object interaction using an interaction communication diagram.

Communication Diagrams

- Hold the same information as sequence diagrams.
- Show links between objects that participate in the collaboration.
- No time dimension, sequence is captured with sequence numbers.
- Sequence numbers are written in a nested style (for example, 3.1 and 3.1.1) to indicate the nesting of control within the interaction that is being modelled.

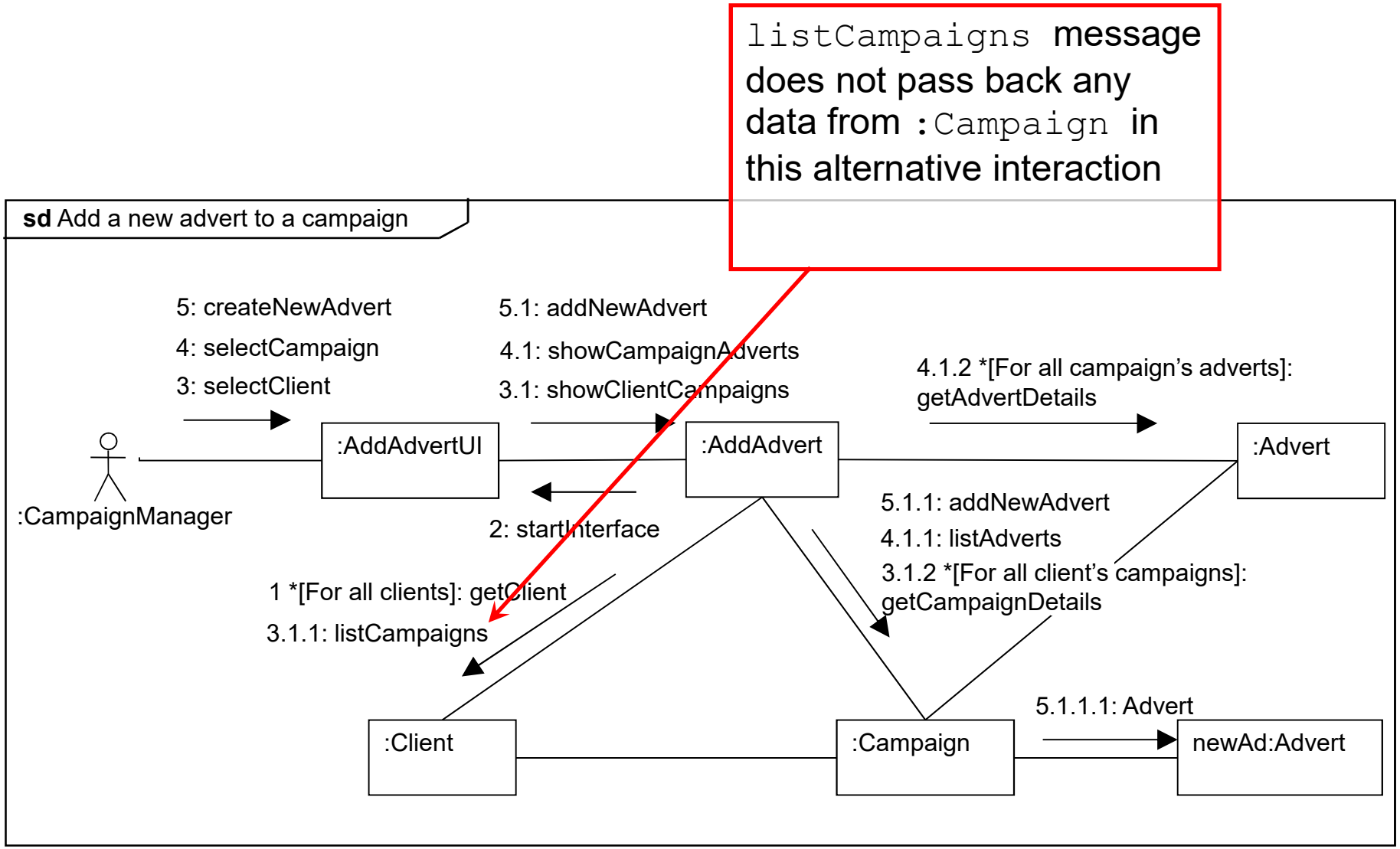
Communication Diagrams

`listCampaigns` message may pass back too much data from `:Campaign`



Notation for iteration different to that in sequence diagram

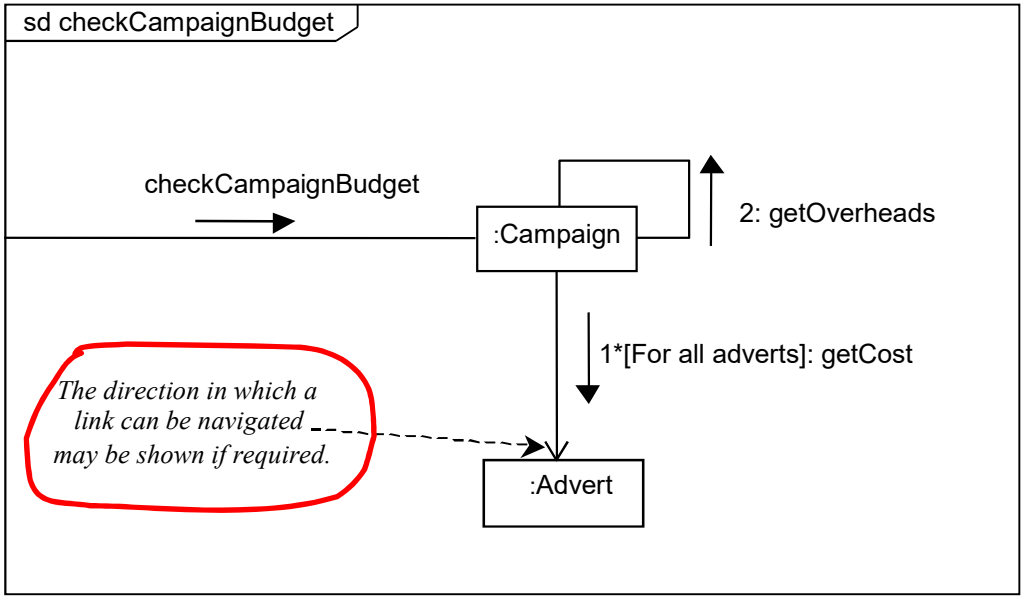
Communication Diagrams



Message Labels

Type of message	Syntax example
Simple message.	`4: addNewAdvert`
Nested call with return value. *The return value is placed in the variable* `name`.	`3.1.2: name = getName`
Conditional message. *This message is only sent if the condition* `[balance > 0]` *is true.*	`5 [balance > 0]: debit(amount)`
Iteration	`4.1 *[For all adverts]: getCost`

Navigating Links



Summary

In this lecture you have learned about:

- how to model object interaction using an interaction communication diagram.

References

- UML Reference Manual (OMG, 2009)
- Bennett, Skelton and Lunn (2005)

  (For full bibliographic details, see Bennett, McRobb and Farmer)