Discussion about Use Cases and UML

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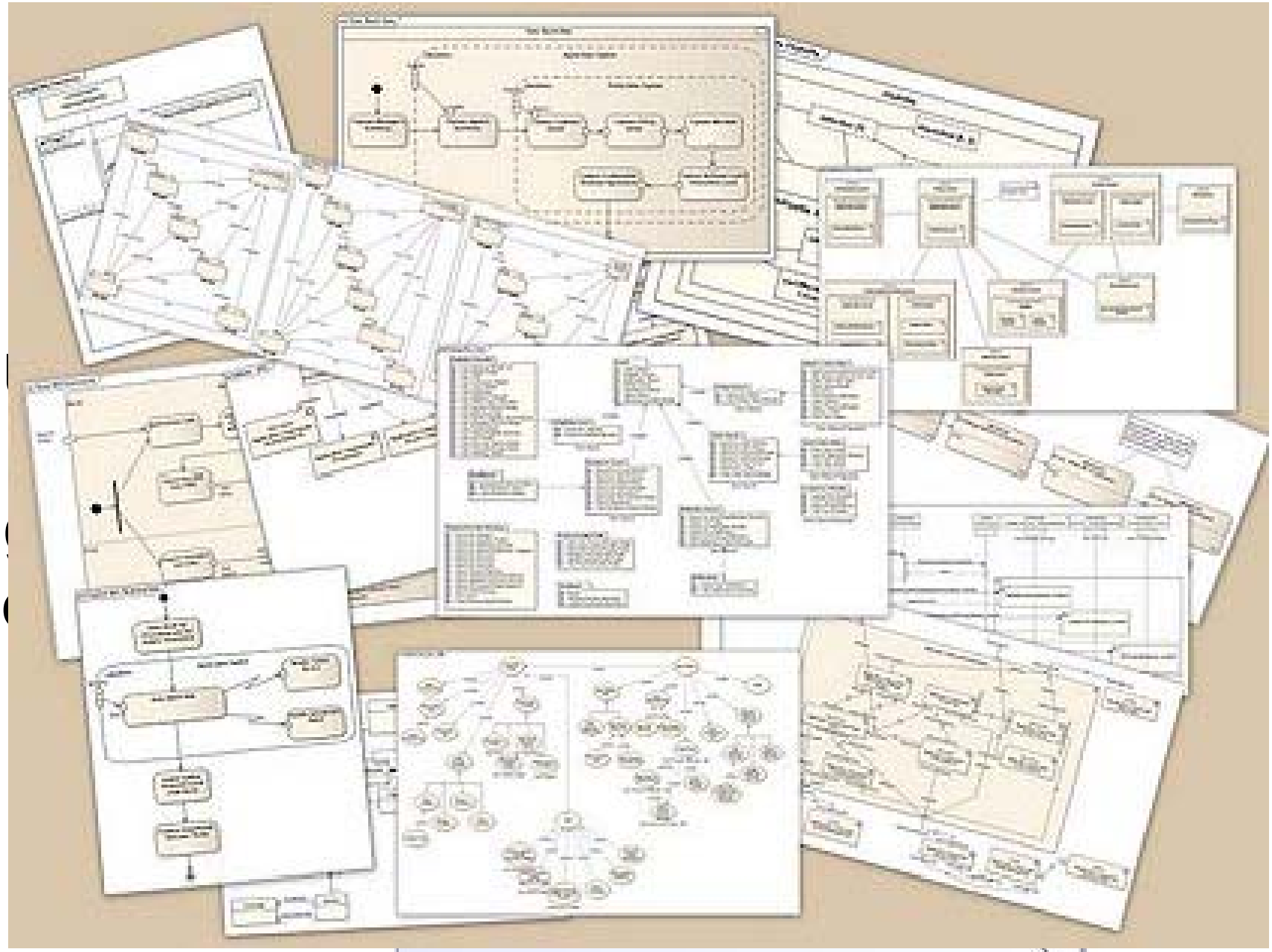
The Goal of Today's Discussion

- A brief introduction to use cases and UML
- Create a picture of how use cases and UML are used in systems development
- Context
- Discuss the perspective of use cases and of UML

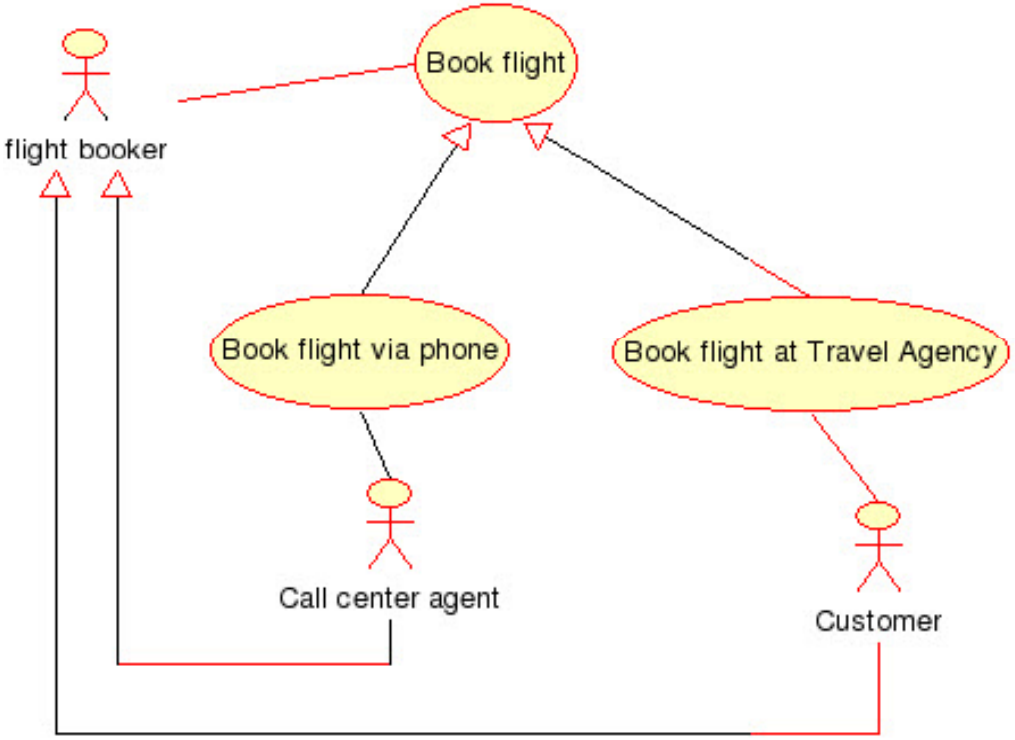
Why Use Cases and UML?

- De-facto standard. Use Cases are combined with models from UML.

- Many concider use cases to be user centred and to include usability



What is a Use Case?



Example of Template for Use Case

- Use Case
- Short Summary
- Actors
- Goal
- Use Case Diagram
- Activity Diagram
- Incude and extends
- Start/preconditions
- Main course of events
- Alternative paths
- Exceptions
- Stop/postconditions

Main course of events

- Buy parking ticket

1. The Car Driver enters a coin in the Ticket Machine
2. The Ticket Machine indicates until when the Car Driver can park
3. The Car Driver continues with step 1 and 2 until satisfied
4. The Car Driver presses the button to retrieve the parking ticket
5. The Ticket Machine prints the parking ticket

Extensions

Main Success Scenario:

1. The Car Driver enters a coin in the Ticket Machine
2. The Ticket Machine validates the coin
3. The Ticket Machine indicates until when the Car Driver can park
4. …

Extensions:

2a Invalid coin:

2a1 The Ticket Machine returns an invalid coin

2a2 Return to step 1

3a Car Driver aborts transaction:

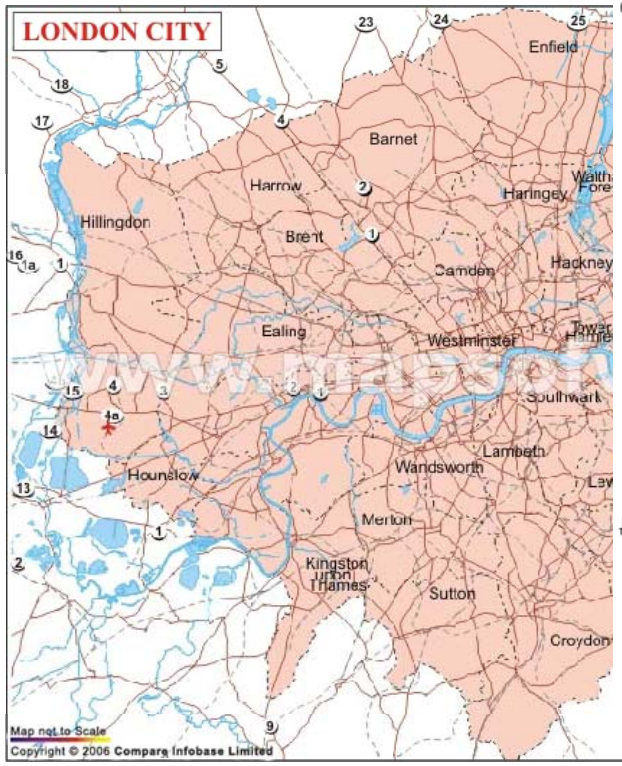
3a1 The Ticket Machine returns the coins that have been entered

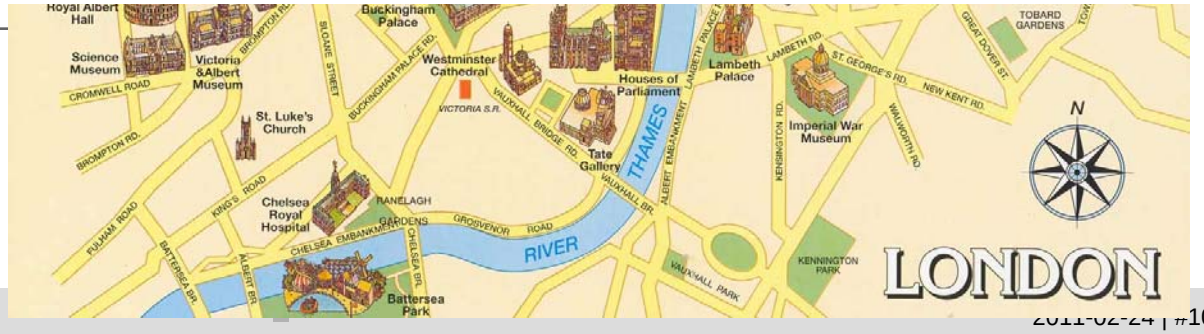
3a2 The scenario ends

How are use cases and UML used in software development?

- Visual UML tools
  - Some non-proprietary, some technical etc
- Workshops with end users

Different perspectives -Maps of reality





What is the perspective of use cases and of UML?

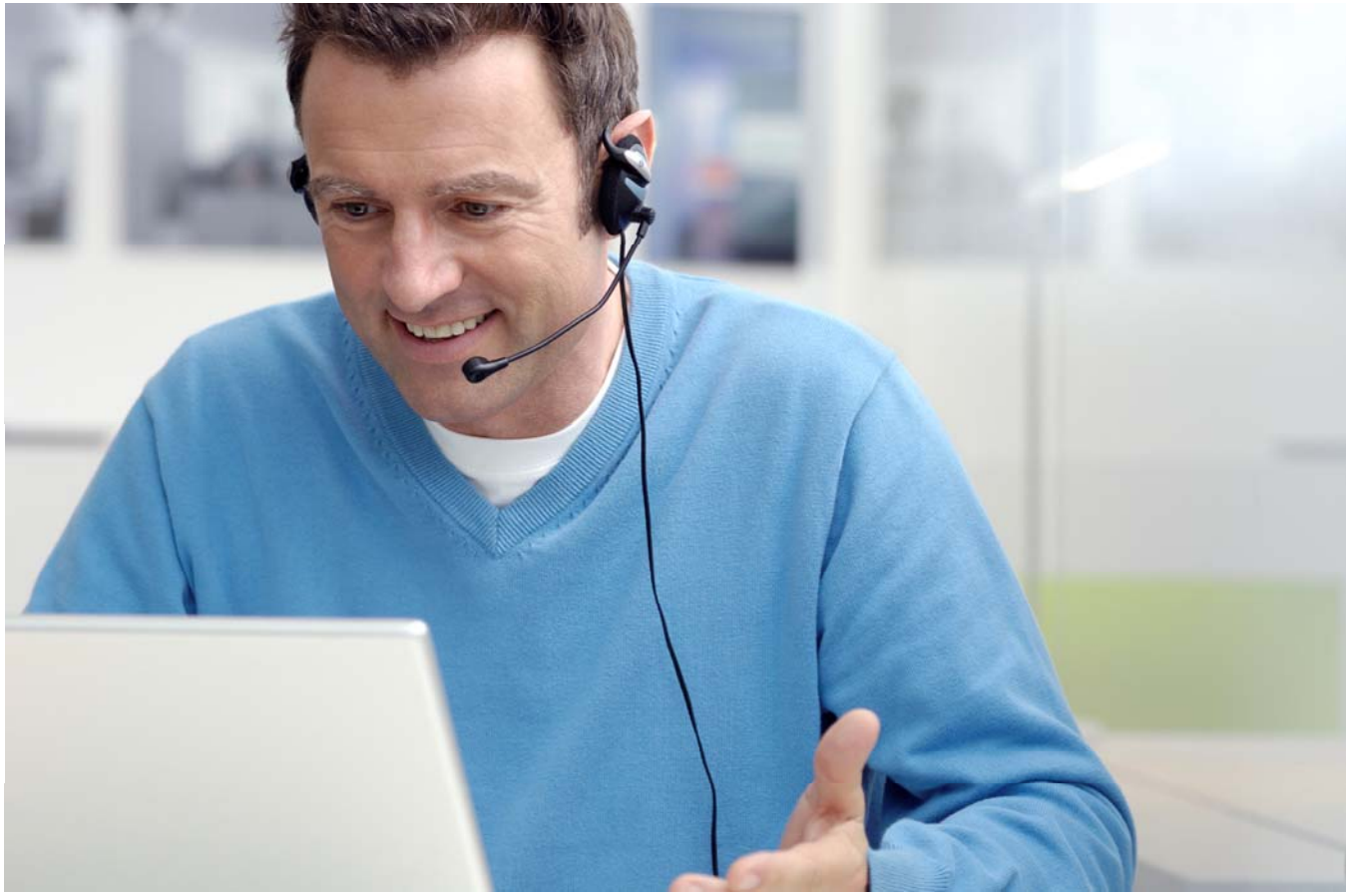
Work

Humans

- **“Each type of external phenomenon with which the system must interact is represented by an actor” (RUP 2002)**

- **In use cases the actor is not a person, it is a role that a user (or any external object) can play**

Use cases and context of use?



How useful are use cases?

- For system developers?
- For users?

- Different goals? Different ways of seeing.

- ”I don’t understand much. I just look out of the window and think: These people know what they are talking about so things will turn out ok”

- Do use cases safeguard the essence of usability?

- ”Use cases, stated simply, allow descriptions of sequences of events that taken together, lead to a system doing something useful”
  - Bittner and Spence (2002) Use Case Modeling

Thank you for your attention!