10. Completing the Interaction Picture: Interaction Overview Diagrams

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What we learnt?

- 9. Focusing on Interaction Timing: **Timing Diagrams**
  - 9.1. What Do Timing Diagrams Look Like?
  - 9.2. Building a Timing Diagram from a Sequence Diagram
  - 9.3. Applying Participants to a Timing Diagram
  - 9.4. States
  - 9.5. Time
  - 9.6. A Participant's State-Line
  - 9.7. Events and Messages
  - 9.8. Timing Constraints
  - 9.9. Organizing Participants on a Timing Diagram
  - 9.10. An Alternate Notation

10. Completing the Interaction Picture: Interaction Overview Diagrams

- 10.1. The Parts of an Interaction Overview Diagram
  构成
- 10.2. Modeling a Use Case Using an Interaction Overview
  - 10.2.1. Pulling Together the Interactions 收集交互
  - 10.2.2. Gluing the Interactions Together 连接交互

10. Completing the Interaction Picture: Interaction Overview Diagrams

- This is the job of interaction overview diagrams; they exist to give you that big picture perspective on your system's interactions.
  关于系统的总体交互

10. Completing the Interaction Picture: Interaction Overview Diagrams

- Interaction overview diagrams provide a high-level view of how several interactions work together to implement a system concern, such as a use case.
  关于系统交互实现系统功能的高级视图
  - Sequence, communication, and timing diagrams focus on specific details concerning the messages that make up an interaction, 交互的细节
  - but interaction overview diagrams tie together the different interactions into a single complete picture of the interactions that make up a particular system concern.
    组合使用三种图

10. Completing the Interaction Picture: Interaction Overview Diagrams

- An interaction overview looks very much like an activity diagram (see Chapter 3) except that each of the actions are interactions within their own right.
  - Think of each part of an interaction overview as a complete interaction in itself. 各部分都有完整交互
  - If one interaction within the overview is most concerned with timing, then a timing diagram could be employed (see Chapter 9),
  - while another interaction of the overview may need to focus on message ordering, and so a sequence diagram could be used (see Chapter 7).
  - The interaction overview glues together separate interactions within your system in the notation that makes most sense to the particular interaction to show how they work together to implement a system concern. 如何共同实现系统功能

10.1. Diagr ew

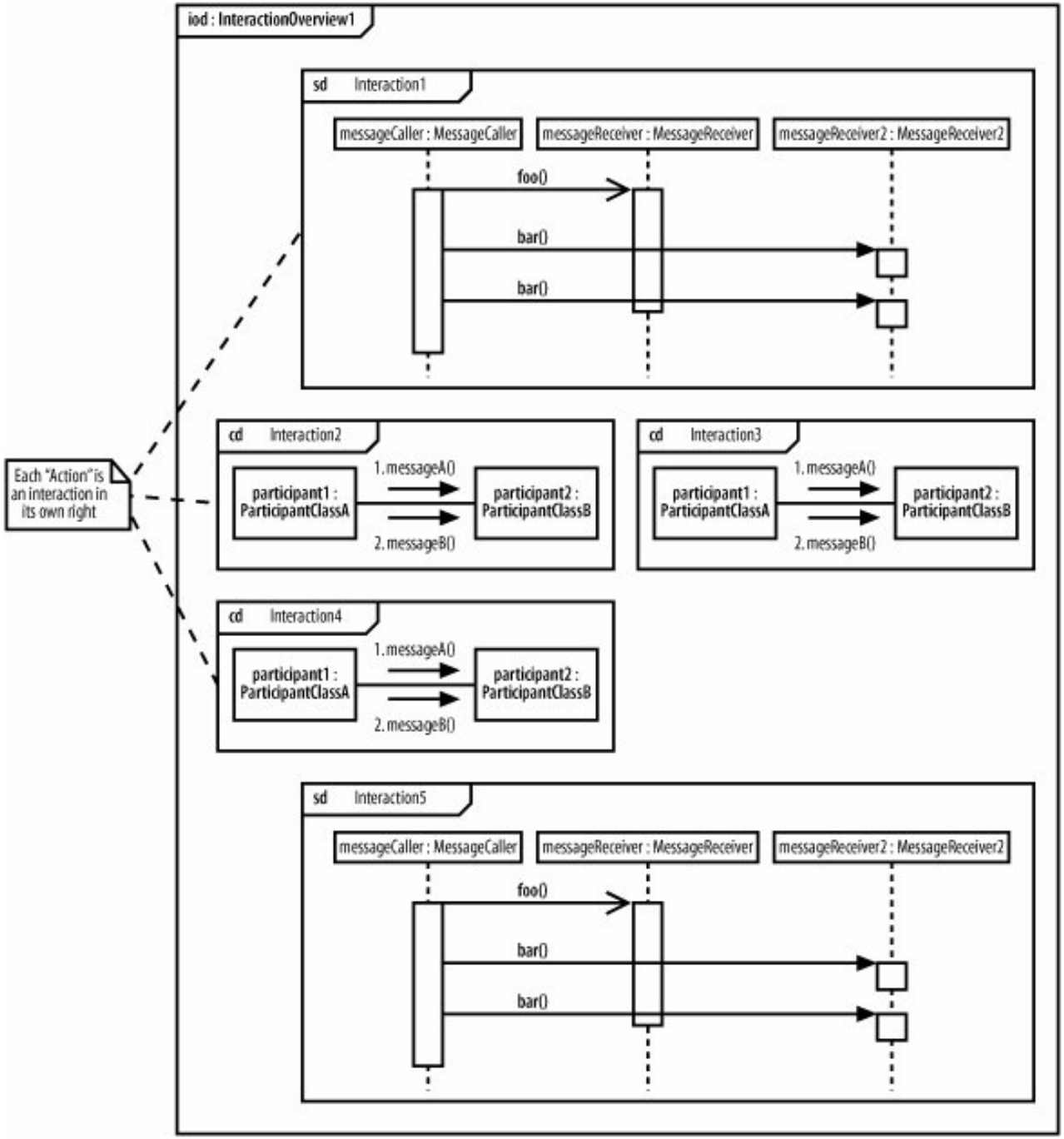


Figure verview
n

Figure 10-2. The lifelines subtitle shows the combined list of participants involved in the interactions within the overview

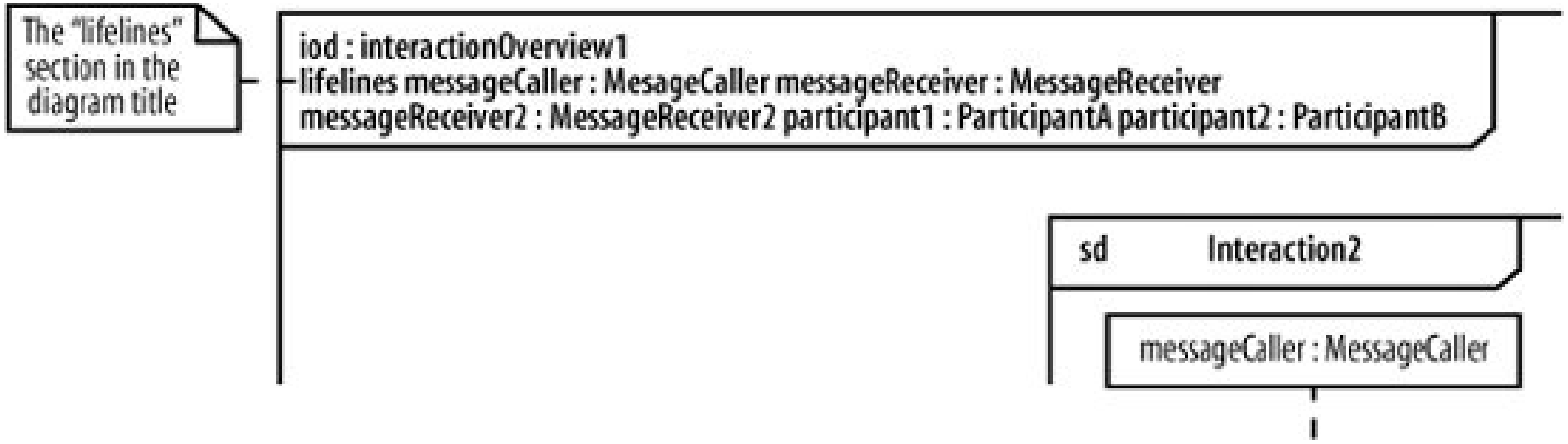
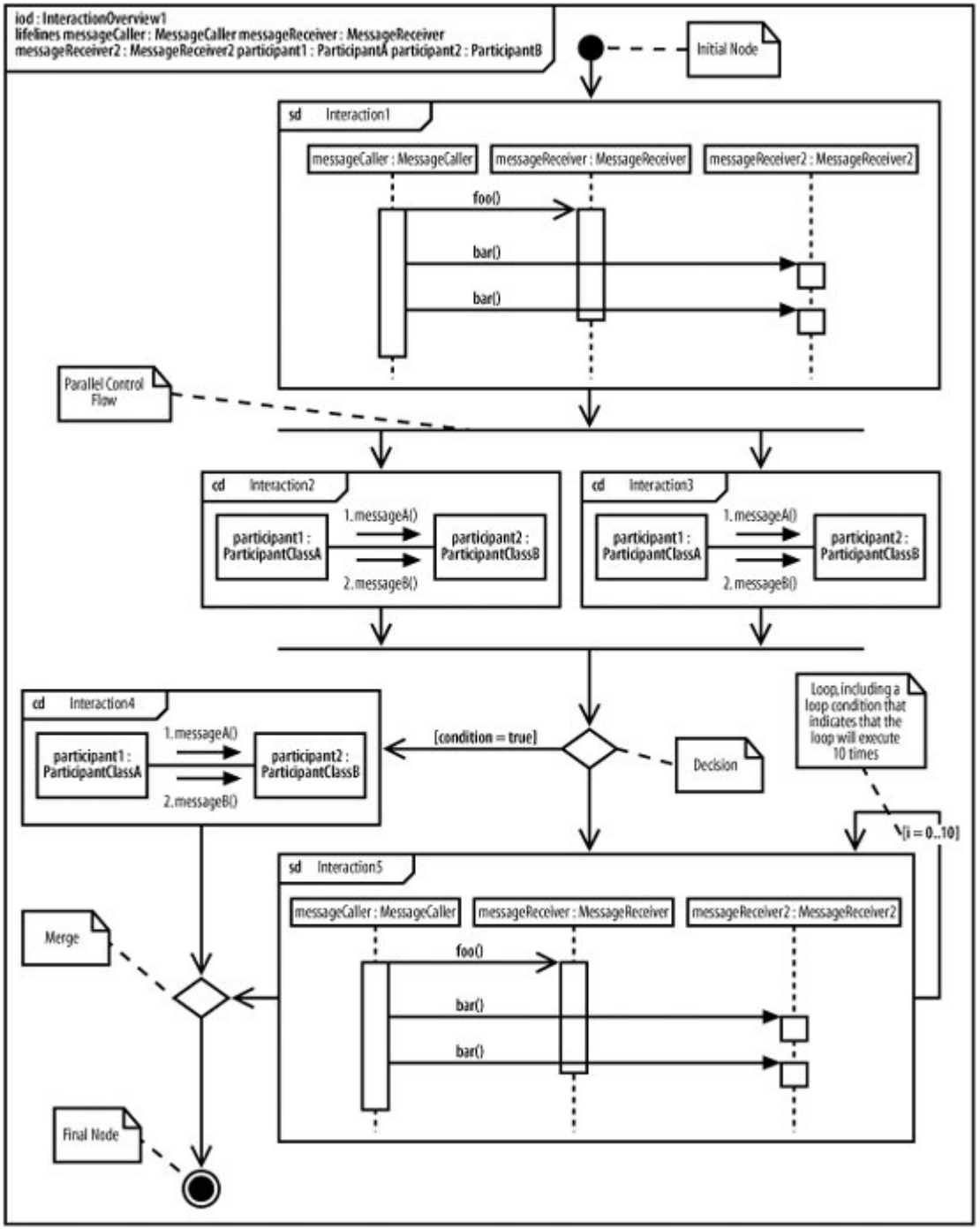


Figure 10-3. S w executes
Interaction1, Interaction4
will execute o e; otherwise,
Interaction5 i ntrol flow
merges and th



10.2. Modeling a Use Case Using an Interaction Overview

- 10.2.1. Pulling Together the Interactions 收集交互
  - First, we need to decide how the interaction overview will be broken down into the most effective diagrams for each of the individual interactions, as shown in Figure 10-4.
  - When modeling the Select Blog Account Type, Create Regular Blog Account, and Tidy Up Author Details interactions, message order is more important than any other factor. The relevant steps can be reused from the sequence diagrams modeled in Chapter 7, as shown in Figure 10-5.
  - For variety's sake, the Enter Author Details will be displayed as a communication diagram, as shown in Figure 10-6.

Figure 10-4. All three types of interaction diagram are used in this overview sd indicates a sequence diagram, cd is for a communication diagram, and, not surprisingly, td stands for a

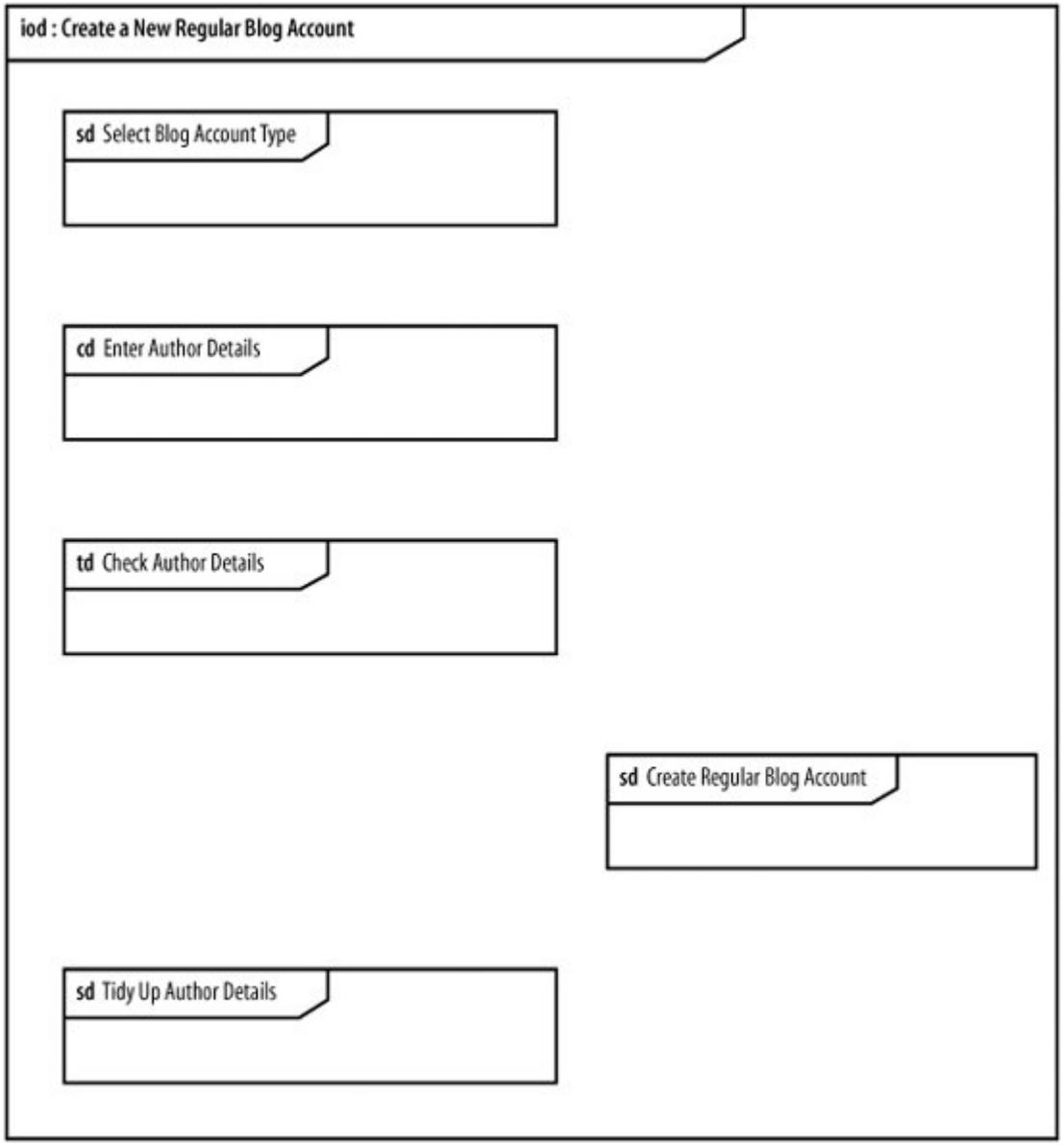


Figure 10- modeled using sequ age ordering

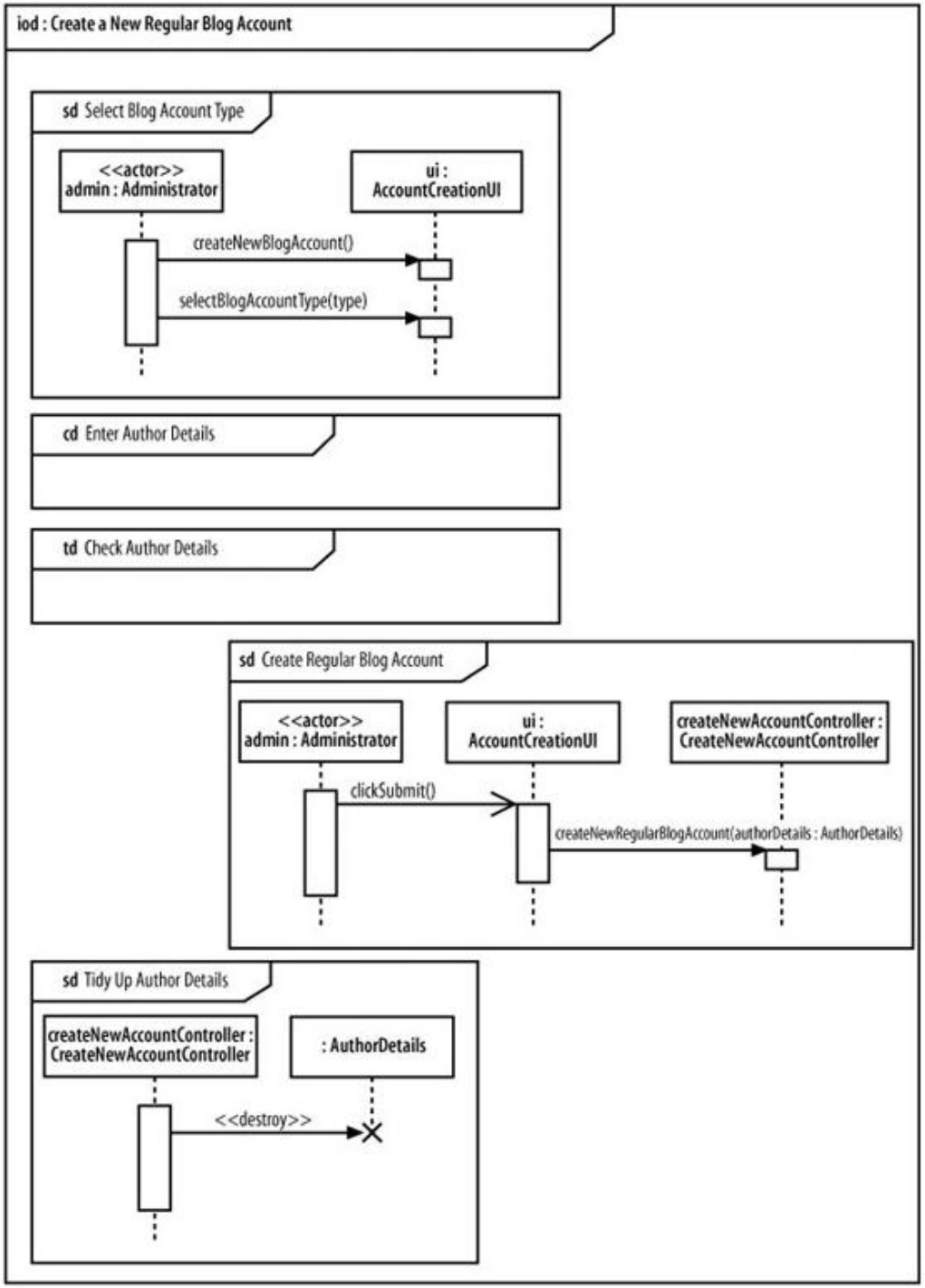


Figure 1 in a commu

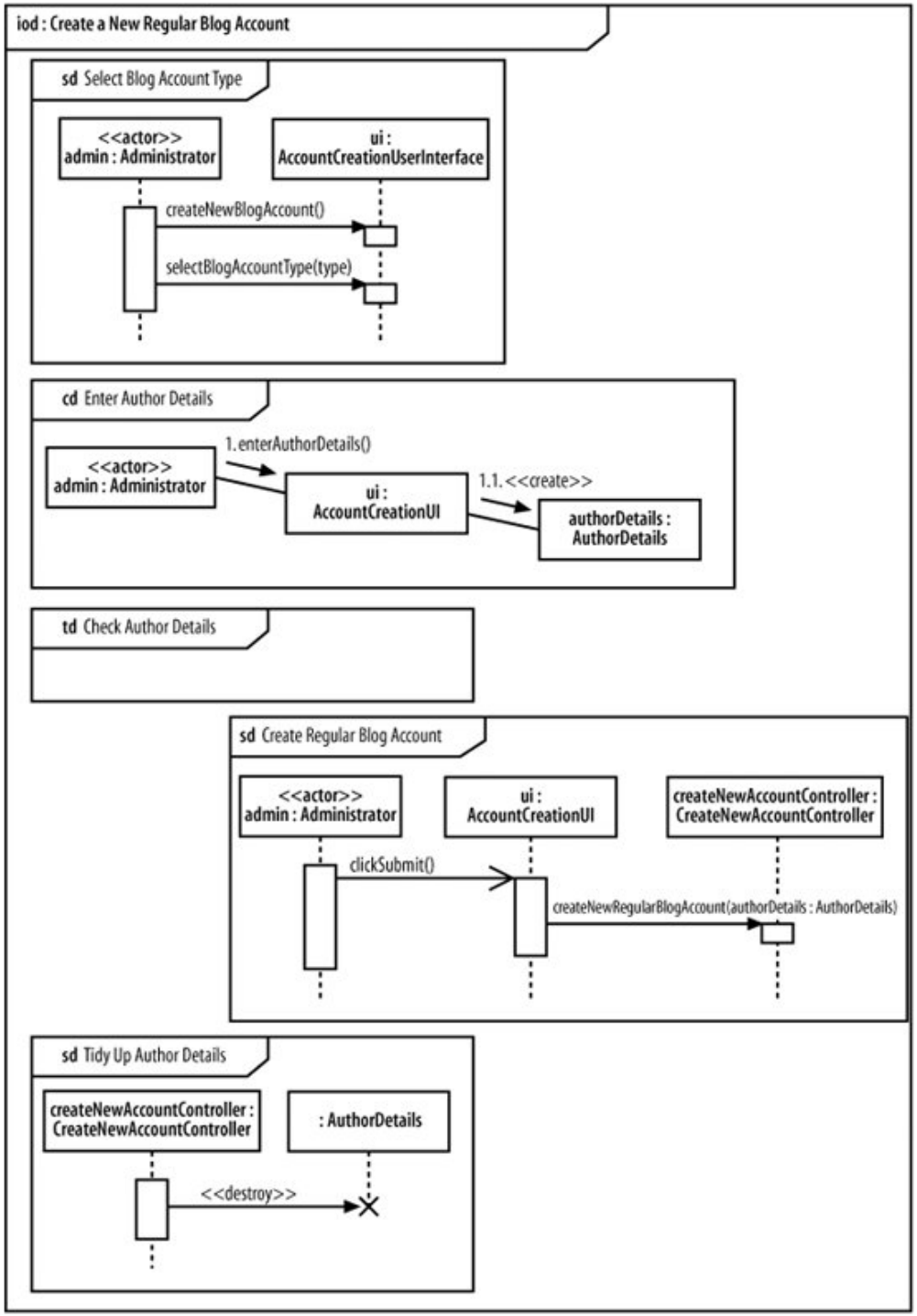


Figure 1 ram to show cri r one interacti

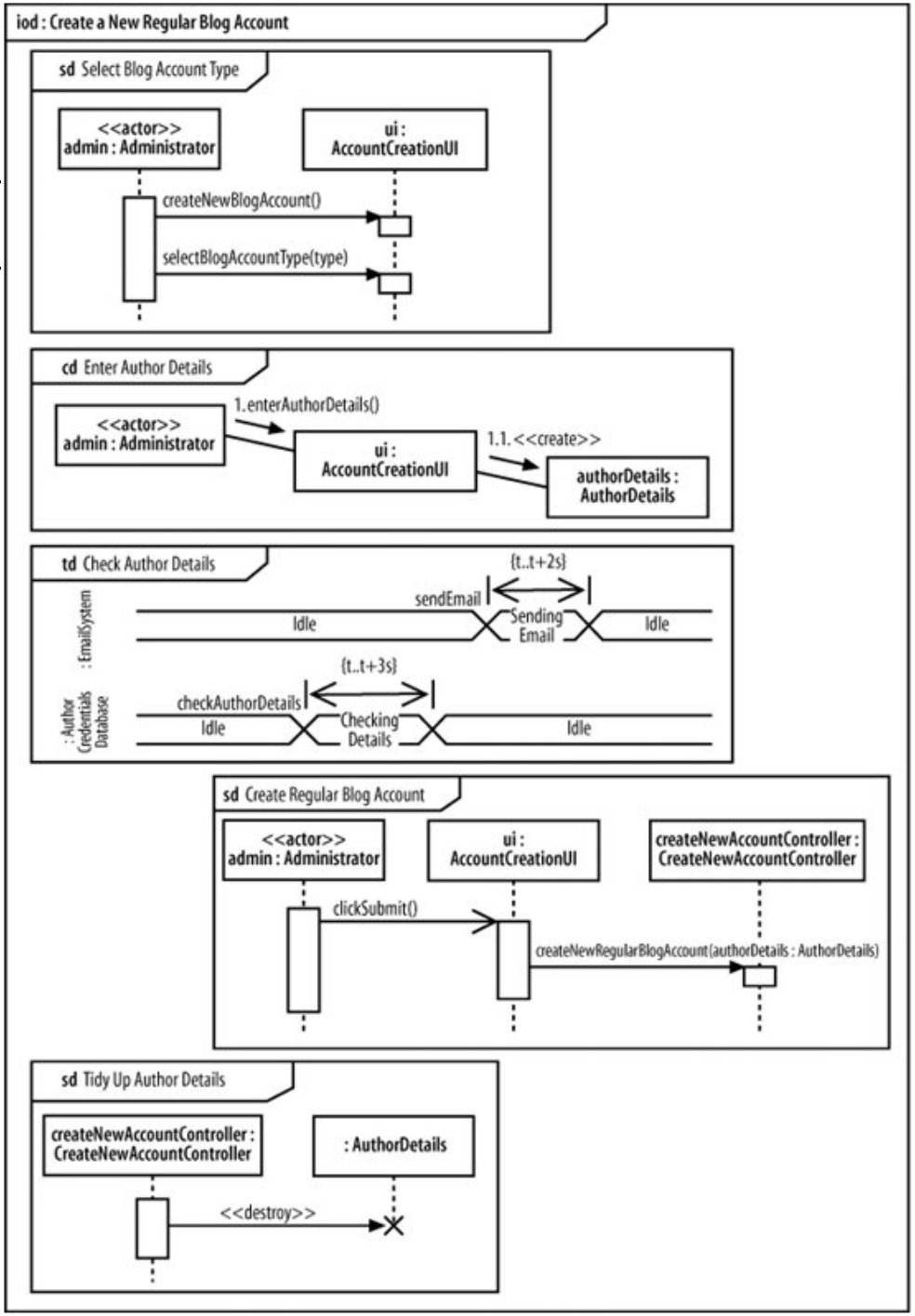
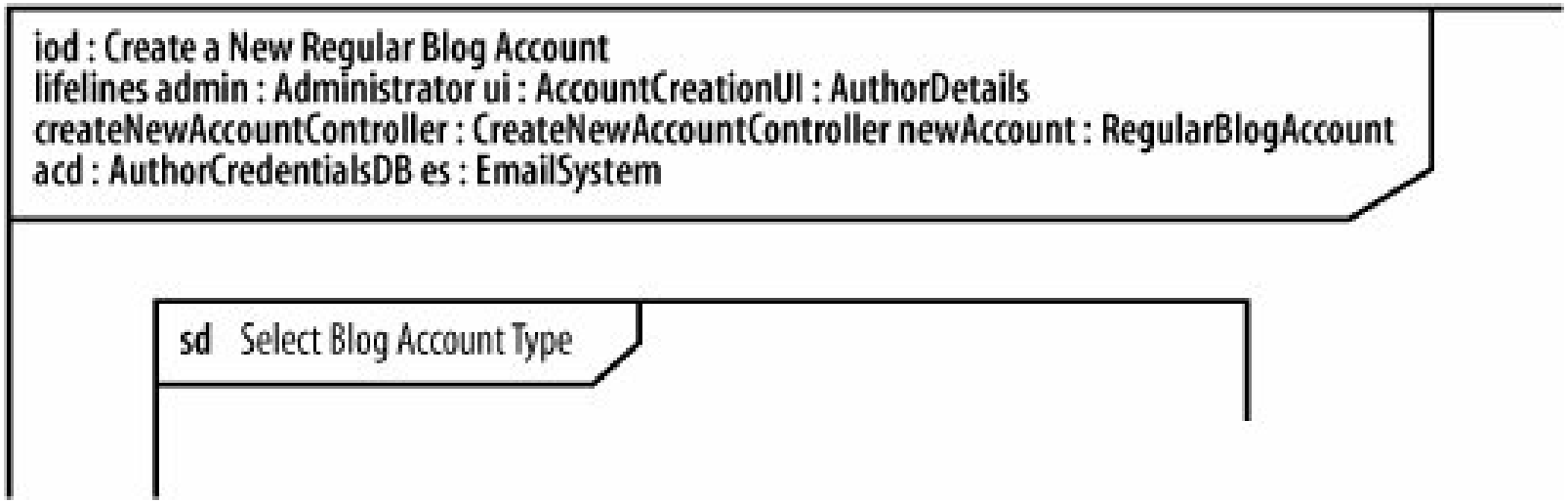


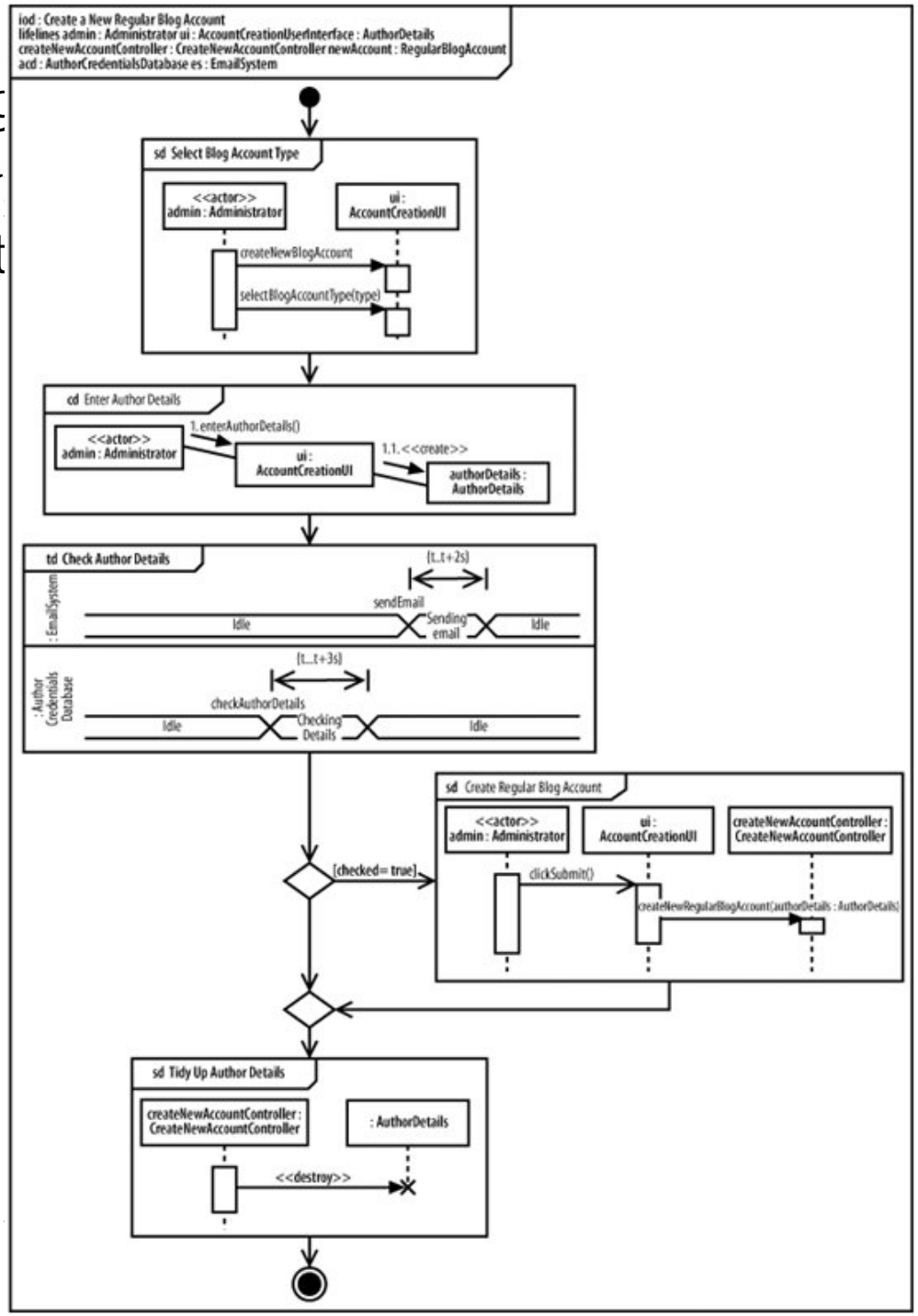
Figure 10-8. Adding each of the participants involved in an interaction to the lifeline list in the interaction overview's title bar



10.2. Modeling a Use Case Using an Interaction Overview

- 10.2.2. Gluing the Interactions Together 连接交互
  - The final piece of the puzzle in the Create a New Regular Blog Account interaction overview is the actual flow of control between each of the separate interaction diagrams, as shown in Figure 10-9. 实际控制流程
  - The control flow in Figure 10-9 shows that each of the separate interactions are executed in order.
    - The one deviation from the normal path occurs at the Create Regular Blog Account interaction, shown as a sequence diagram, which is executed only if the author details checked out during the Check Author Details interaction.

Figure 10-9 nd finishing w rol is the thread that gether



Summary

- 10. Completing the Interaction Picture:
  Interaction Overview Diagrams
  - 10.1. The Parts of an Interaction Overview Diagram
  - 10.2. Modeling a Use Case Using an Interaction Overview
    - 10.2.1. Pulling Together the Interactions
    - 10.2.2. Gluing the Interactions Together

Next …

- 11. Modeling a Class's Internal Structure: Composite Structures
- 12. Managing and Reusing Your System's Parts: Component Diagrams
- 13. Organizing Your Model: Packages

See you …