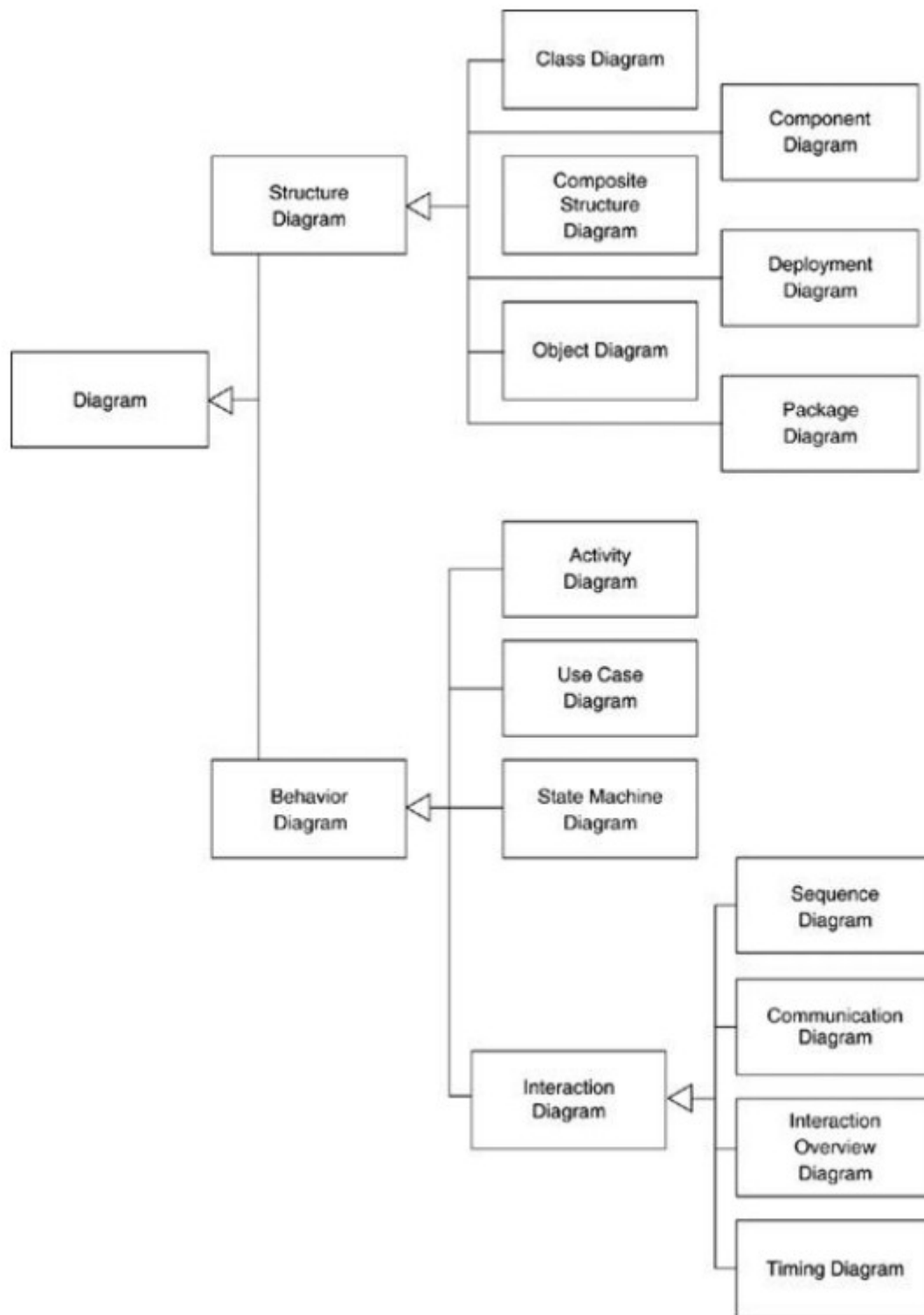
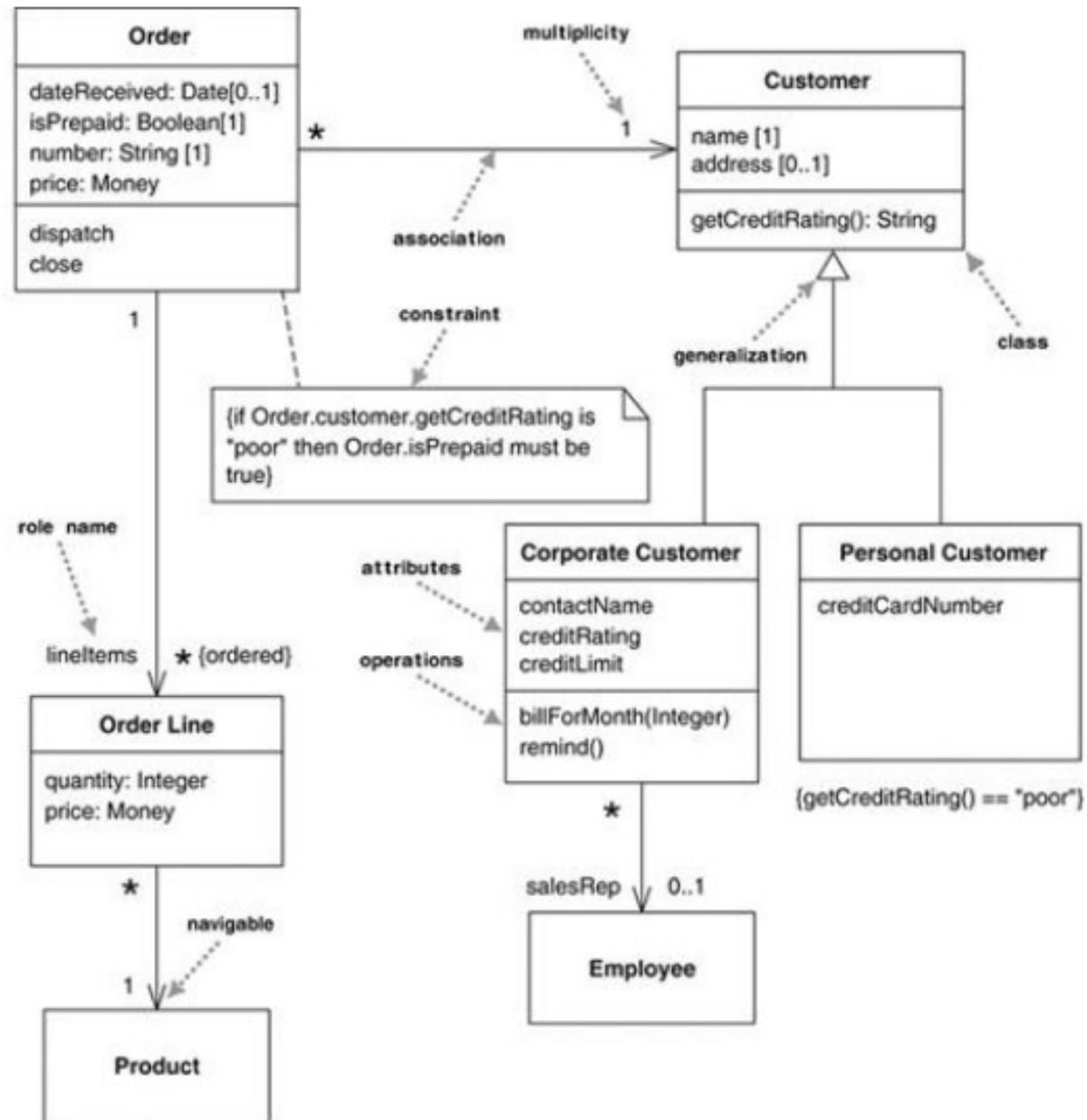


Class diagrams: essentials

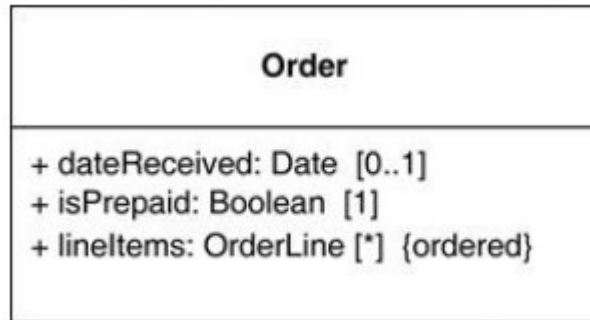
- A **class diagram** describes the types of objects in the system and the various kinds of static relationships that exist among them.



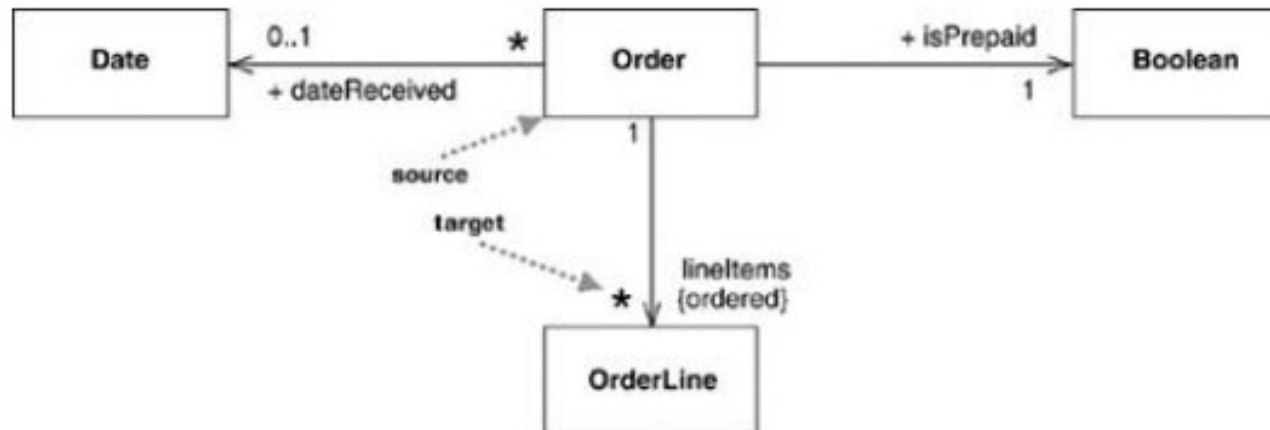
Simple class diagram



Associations

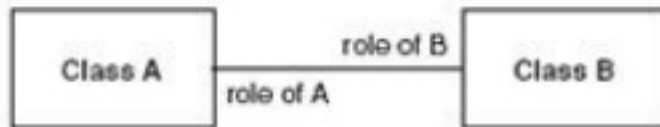


or

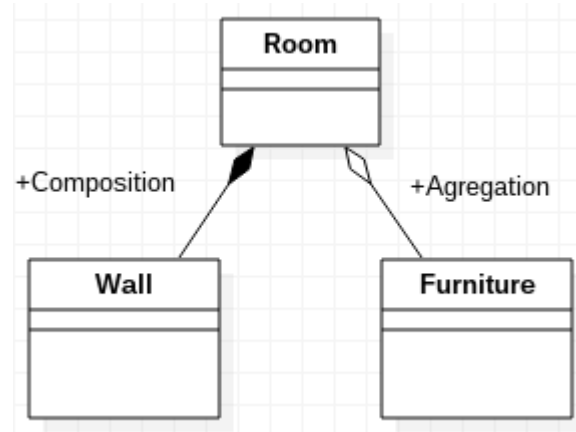
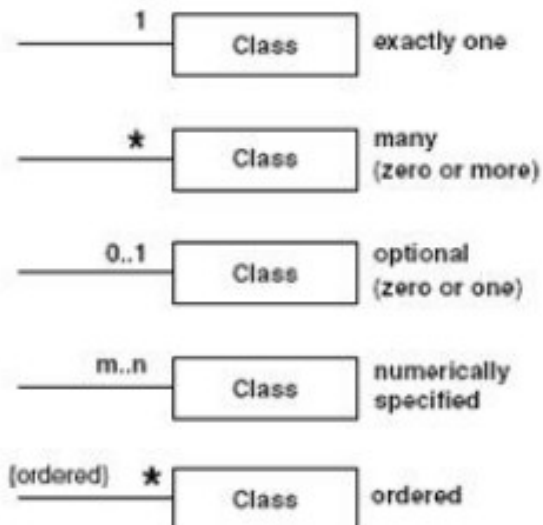


Associations

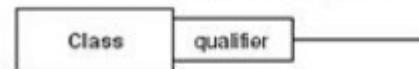
Association p. 37



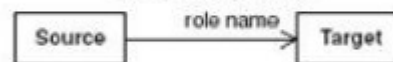
Multiplicities p. 38



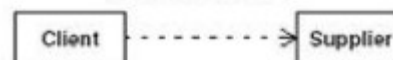
Qualified Association p. 74



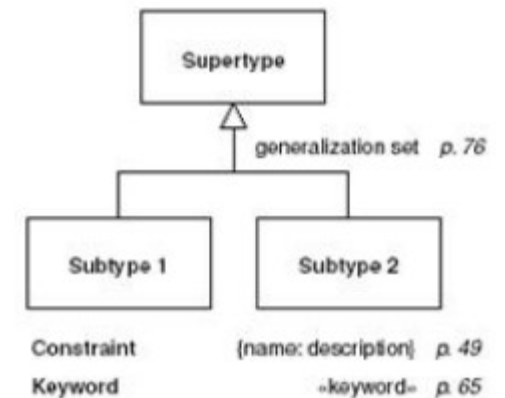
Navigability p. 42



Dependency p. 47



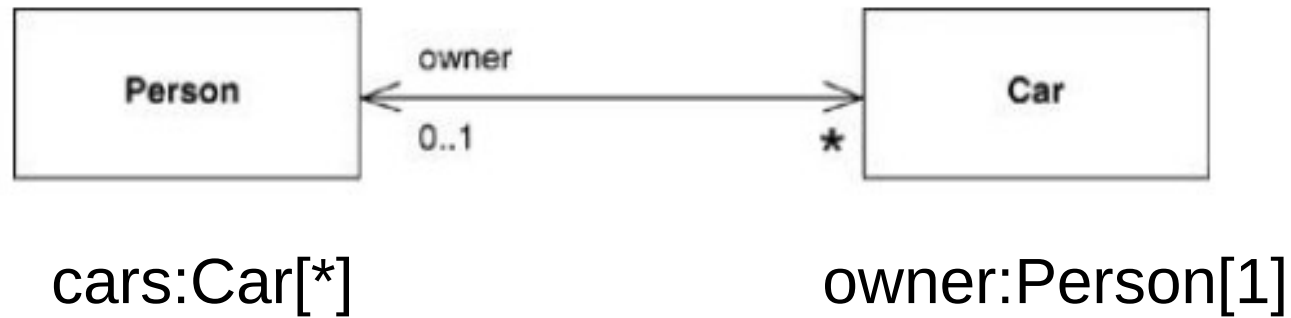
Generalization p. 45



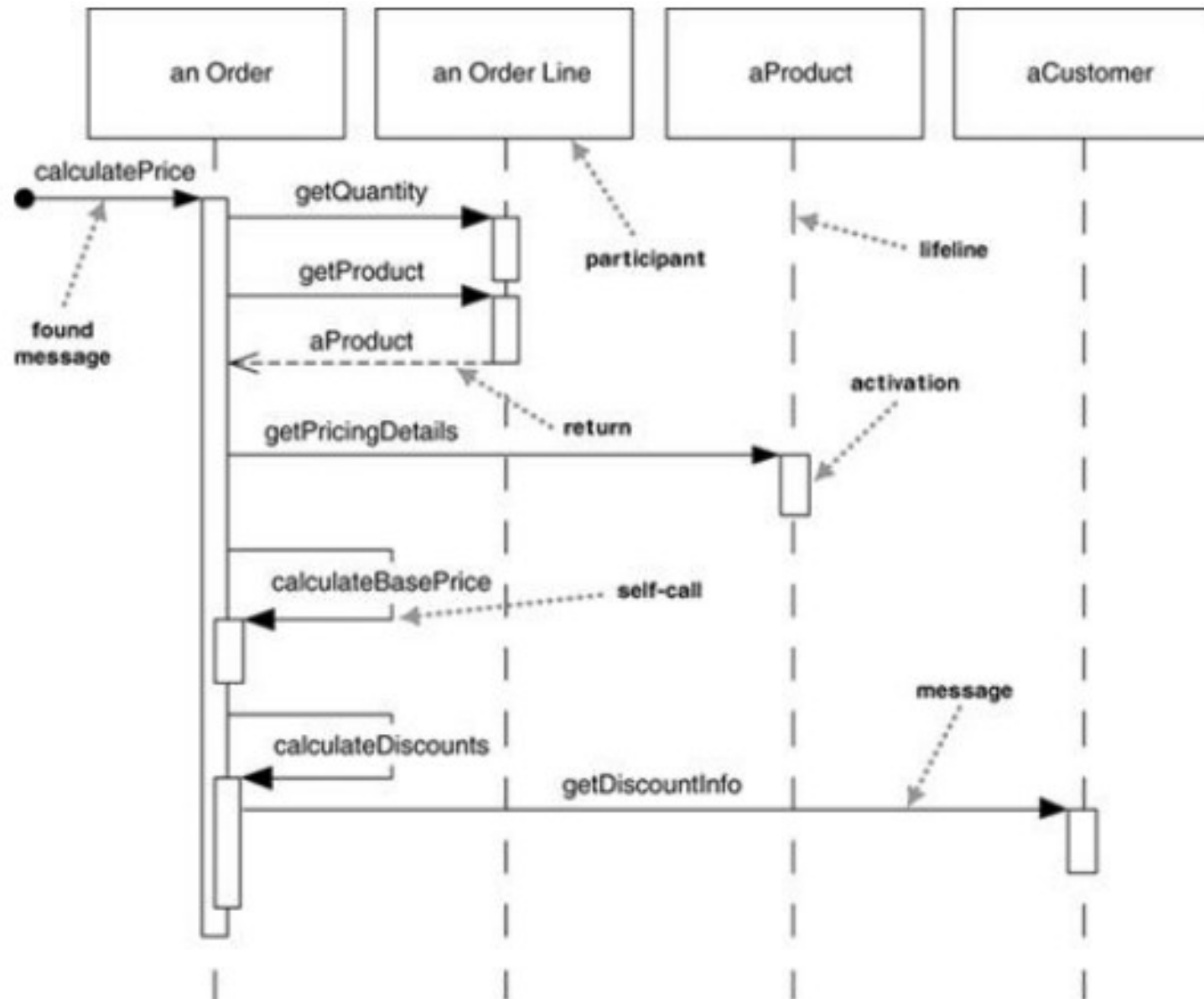
Associations



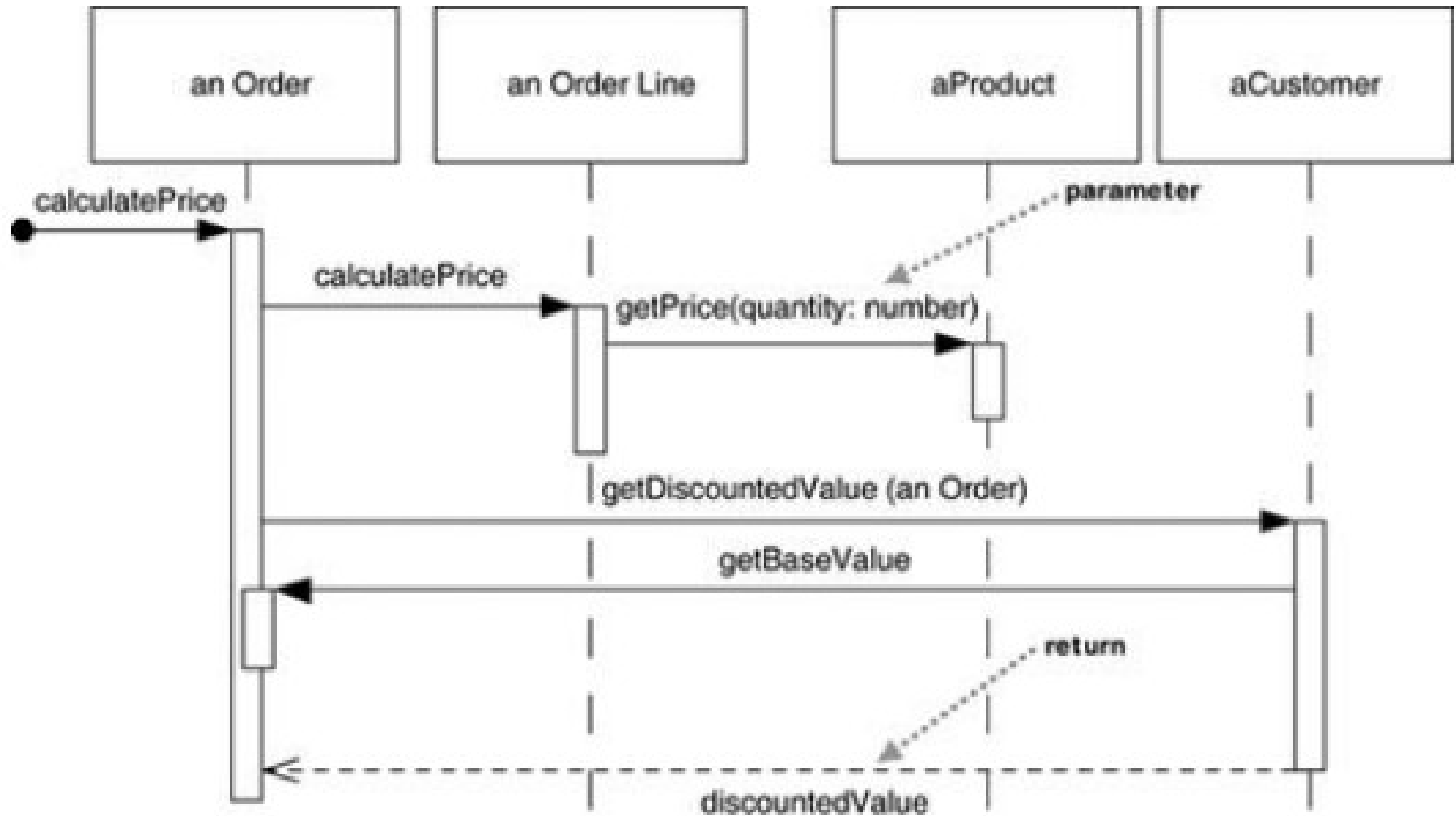
Bidirectional Associations



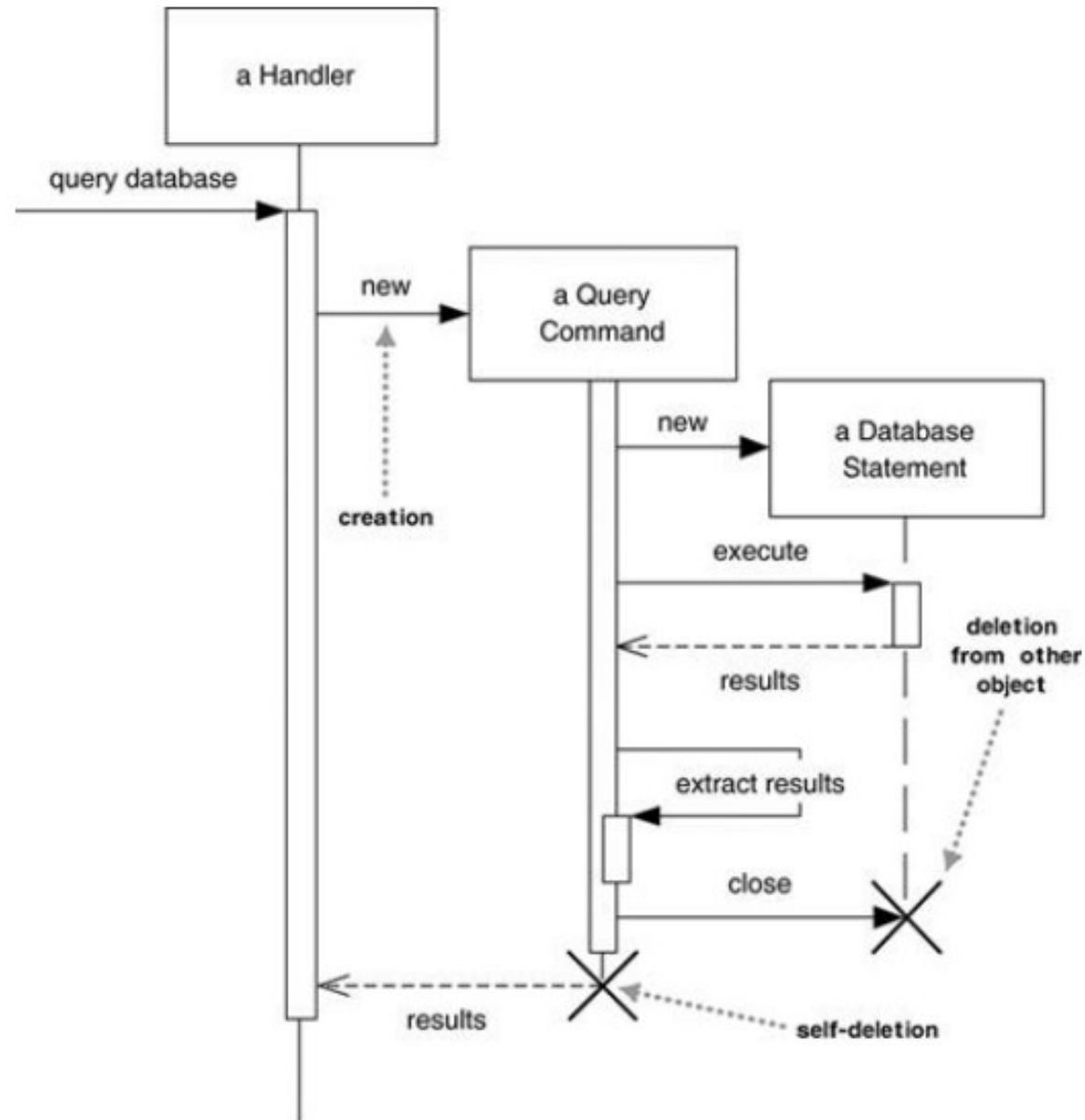
Sequence diagram. Centralized control



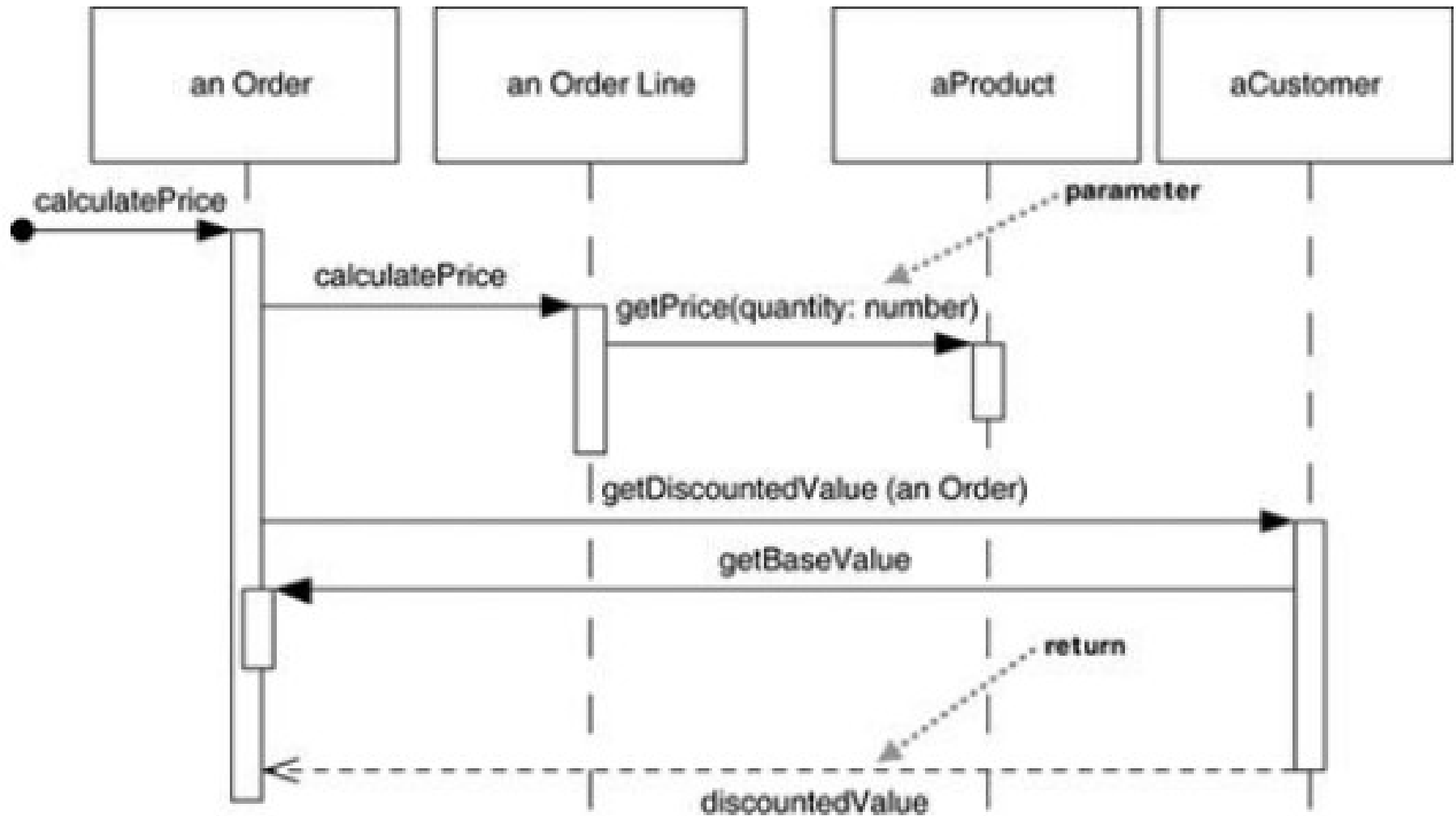
Sequence diagram. Distributed control



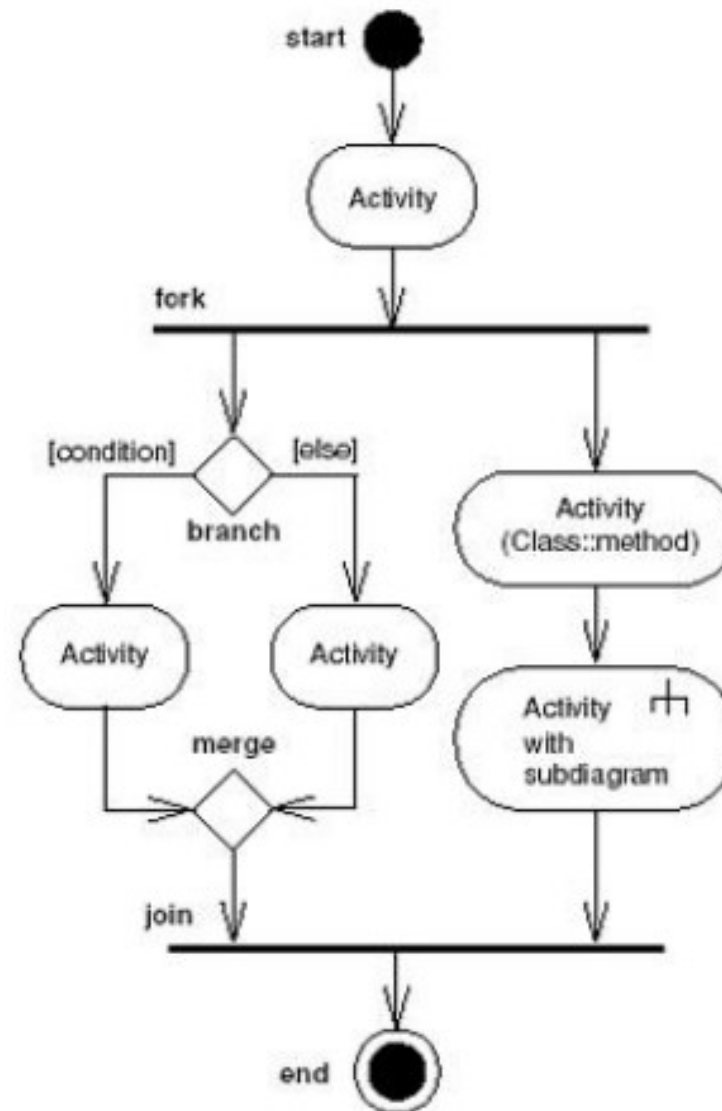
Sequence diagram. Creation, deletion



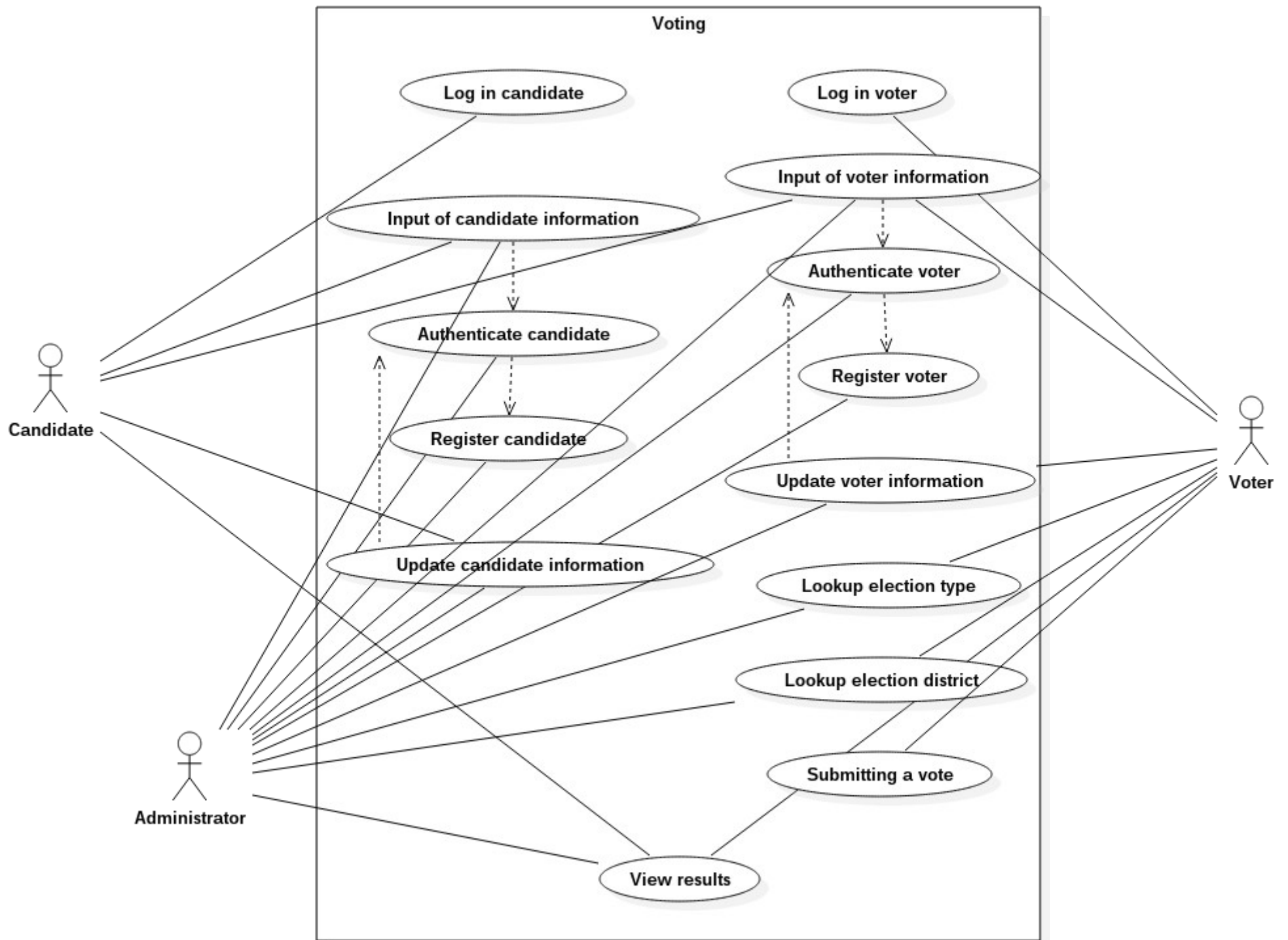
Sequence diagram. Distributed control



Activity diagram



Use Case	Description
Authenticate candidate	Using candidate's information, administrator check for candidate's eligibility
Register candidate	Administrator register eligible candidates to the system.
Log in Candidate	Using the username, password and the identification number, candidates can log in to the voting system.
Update candidate information.	Update existing information.
Lookup candidate	Using candidate name, find candidate information, election headquarter, and the election district a candidate is enrolled in.
Authenticate voter	Using voter's information, administrator check for voter's eligibility
Register voter	Administrator register eligible candidates to the system.
Log in voter	Using the username, password and the identification number, voter can log in to the voting system.
Update voter information	Update voter existing information
Lookup election type	Find the election type you want to participate in.
Lookup election district	Using district name, find candidate names who are enrolled to a specific district
Submitting a vote	Voter can cast his/her vote.
View results	Using the election information, show the final results and the number of votes each candidate has received.



Object Classes	Attributes
Candidate	Candidate name, identification number, password, constituency id, headquarter address, phone, and email
Voter	Voter name, identification number, password, constituency, email, phone
Administrator	Admin name, identification number, password
Cast vote	Voter id, candidate id, constituency id, submit vote, cancel vote
Consistuecy	Consistuecy name, identification number
Voting server	Candidate id, voter id, constituency id, votes count, reports production
Results	Candidate id, constituency id, votes count, display

