

Figure 3.1 Use case diagram for the library.

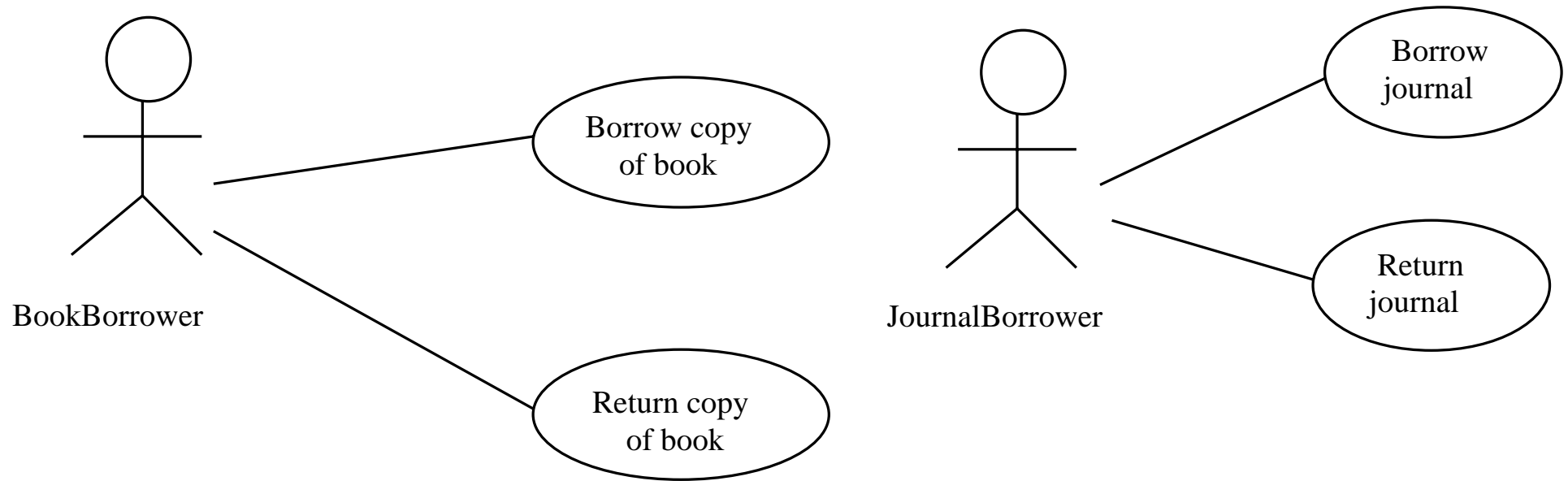


Figure 3.2 Use case diagram for the first iteration.

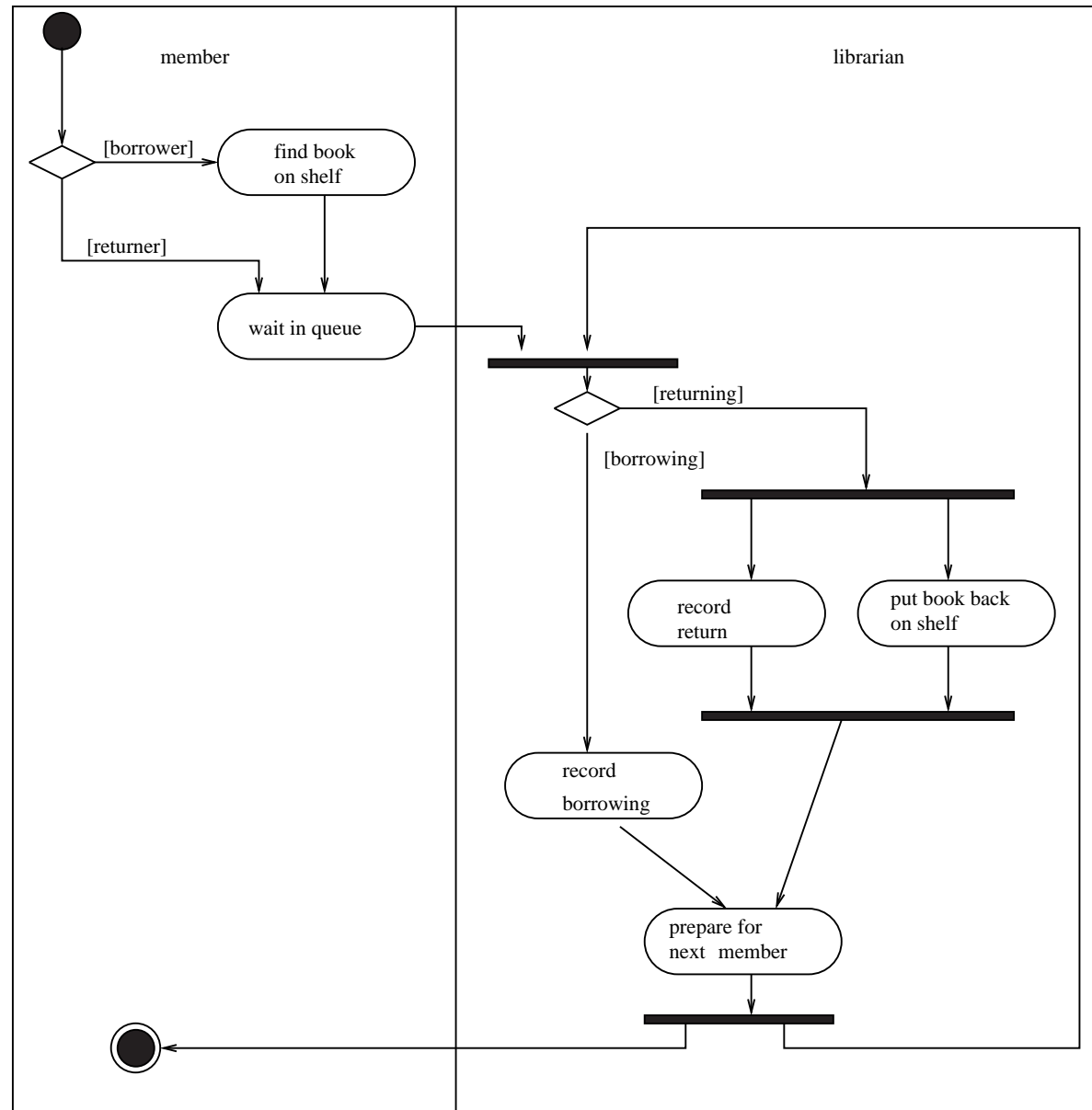


Figure 11.7 Business level activity diagram of the library.

Books and journals The library contains books and journals. It may have several copies of a given book. Some of the books are for short term loans only. All other books may be borrowed by any library member for three weeks. Members of the library can normally borrow up to six items at a time, but members of staff may borrow up to 12 items at one time. Only members of staff may borrow journals.

Borrowing The system must keep track of when books and journals are borrowed and returned, enforcing the rules described above.

Figure 3.3 Nouns and noun phrases in the library.

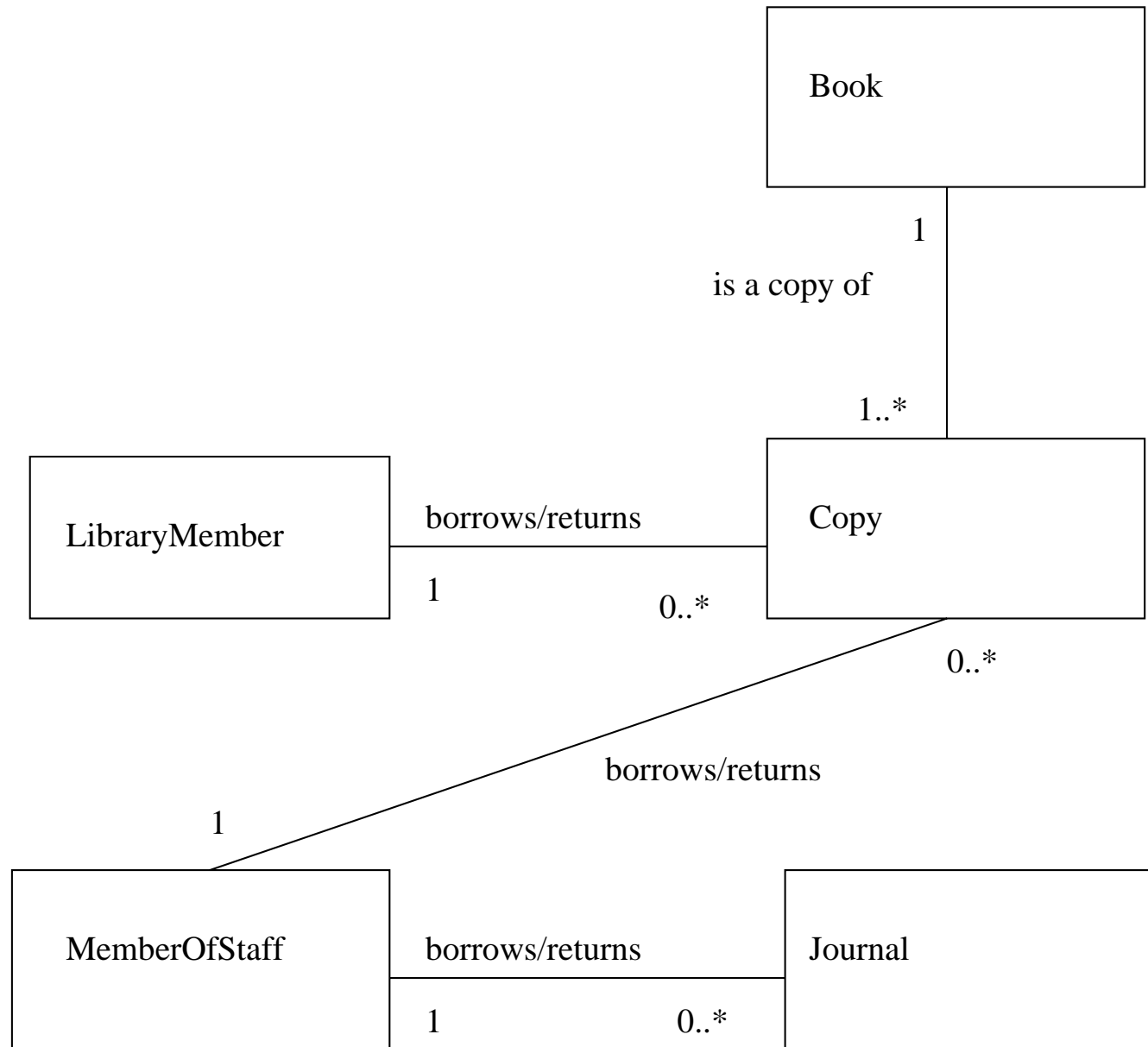


Figure 3.4 Initial class model of the library.

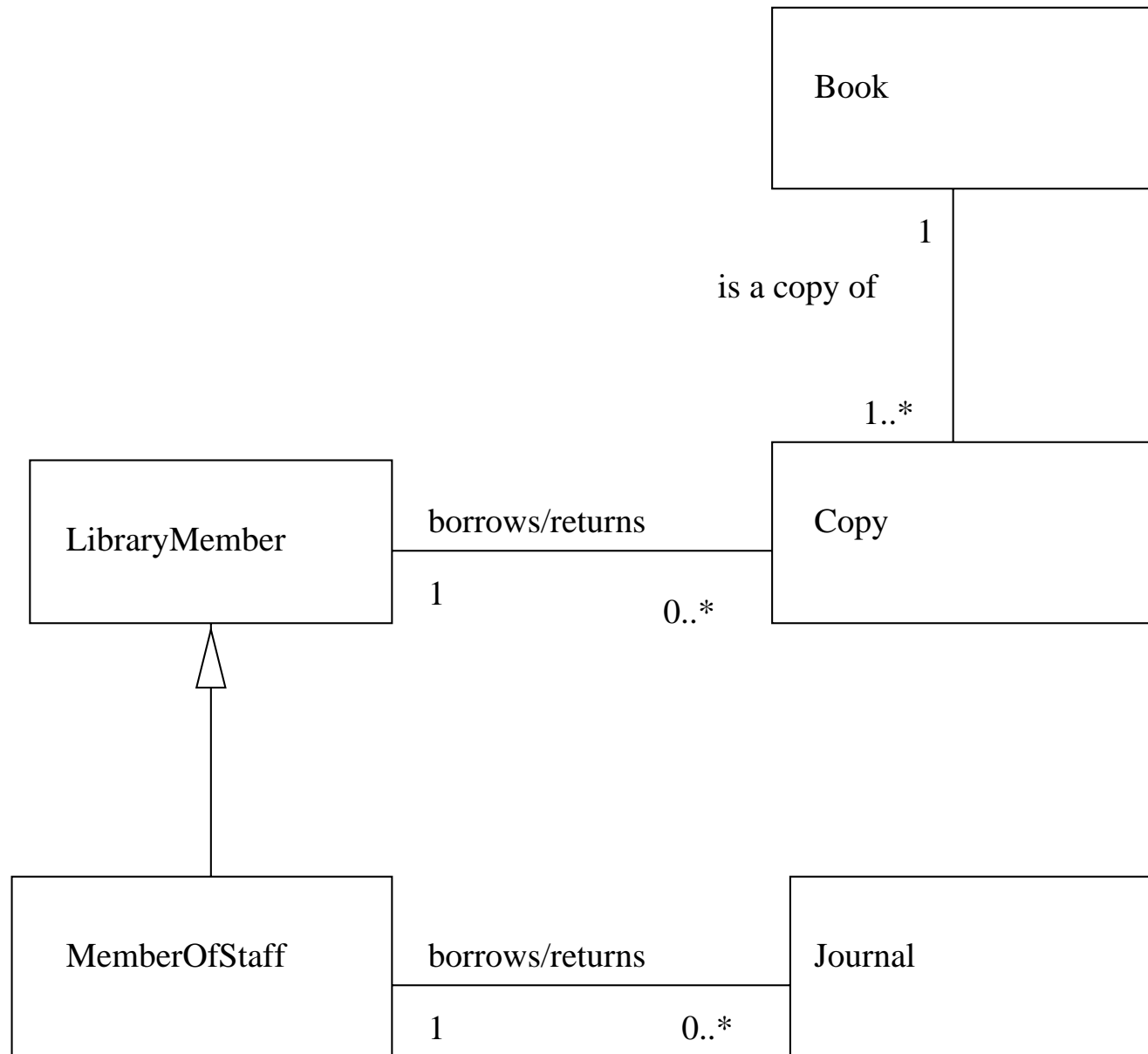


Figure 3.5 Revised library class model.

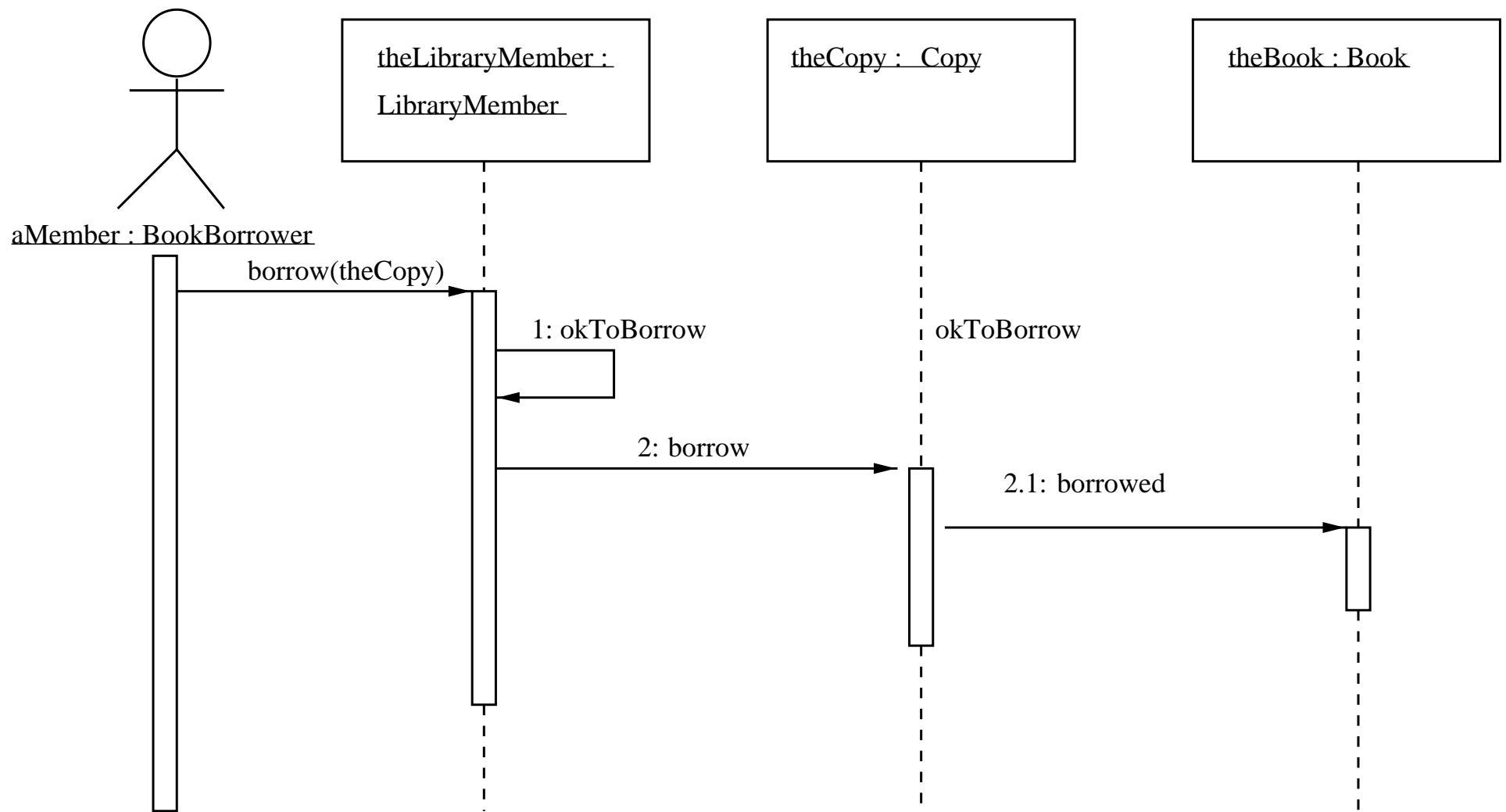


Figure 3.6 Interaction shown on a sequence diagram.

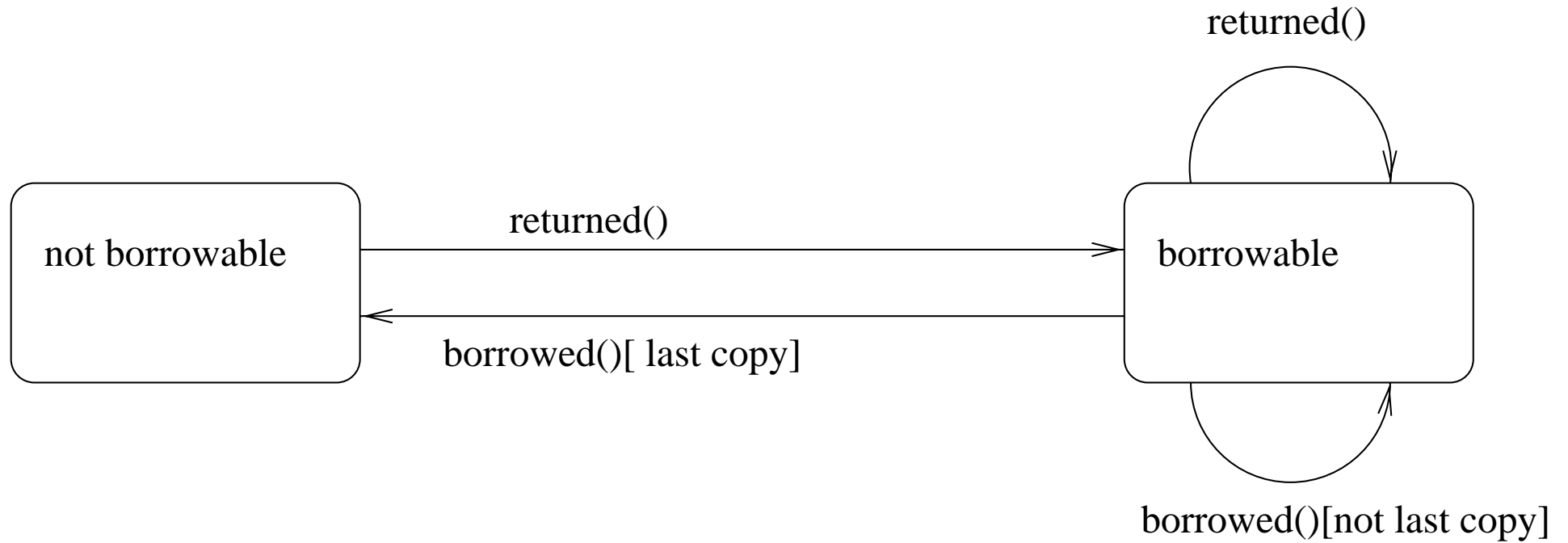


Figure 3.7 State diagram for class Book.

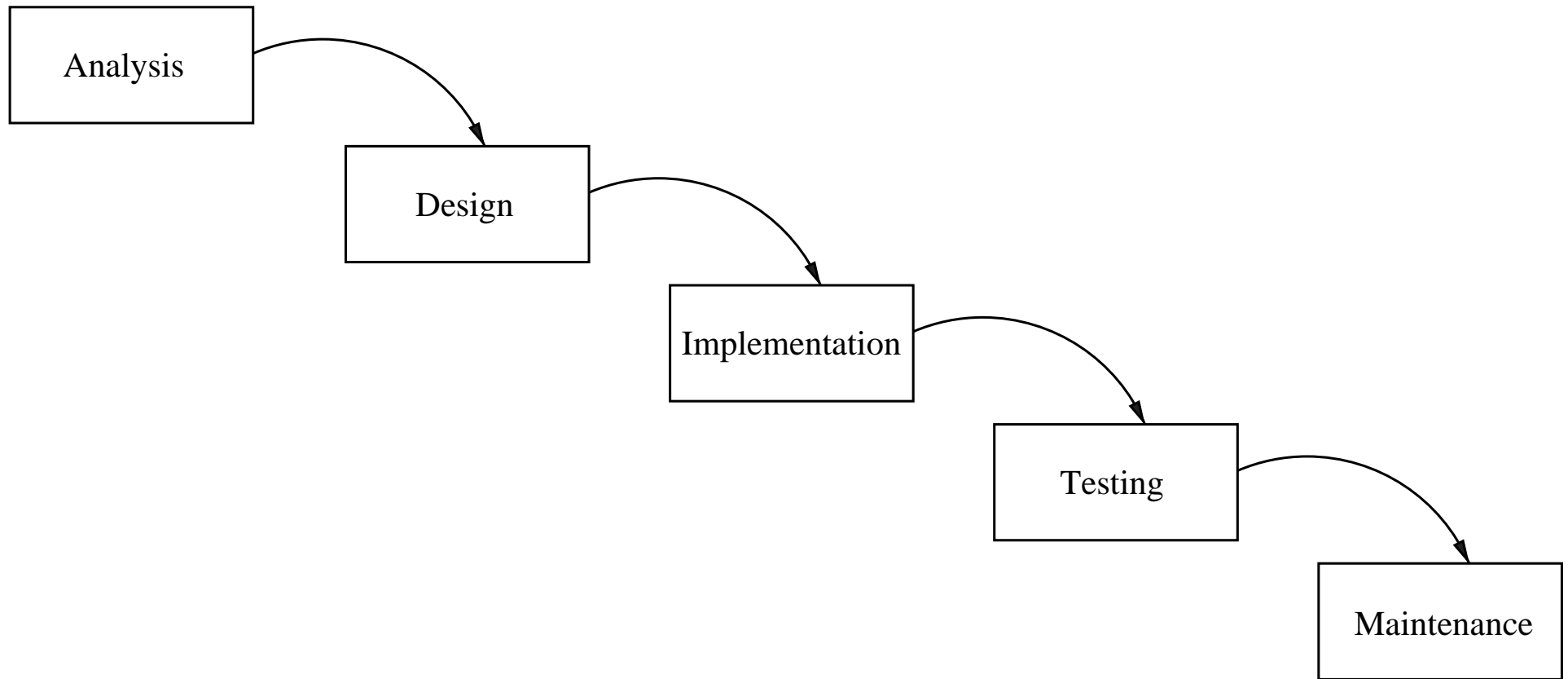


Figure 4.1 A simple waterfall process.

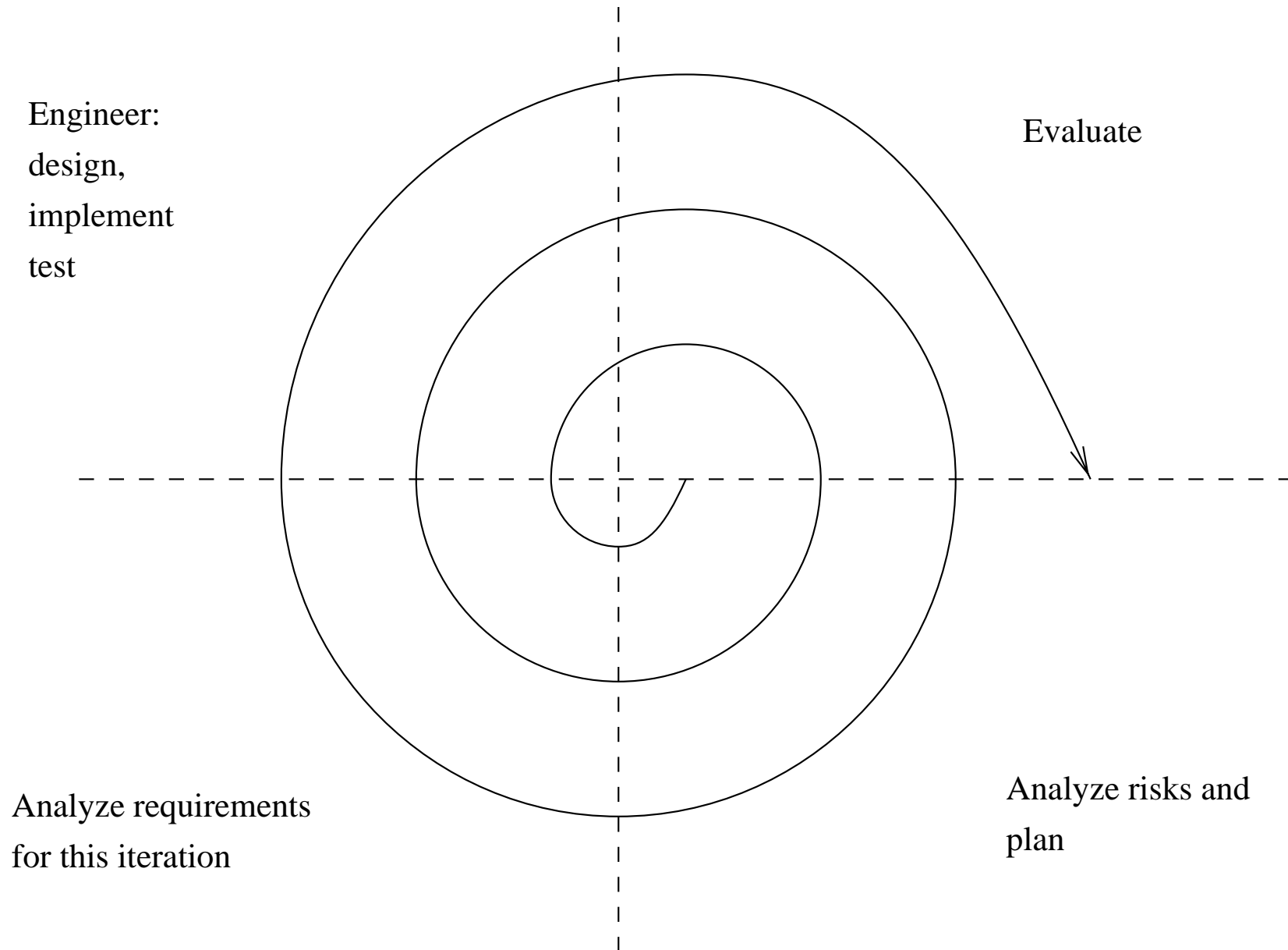


Figure 4.2 A simple spiral process.