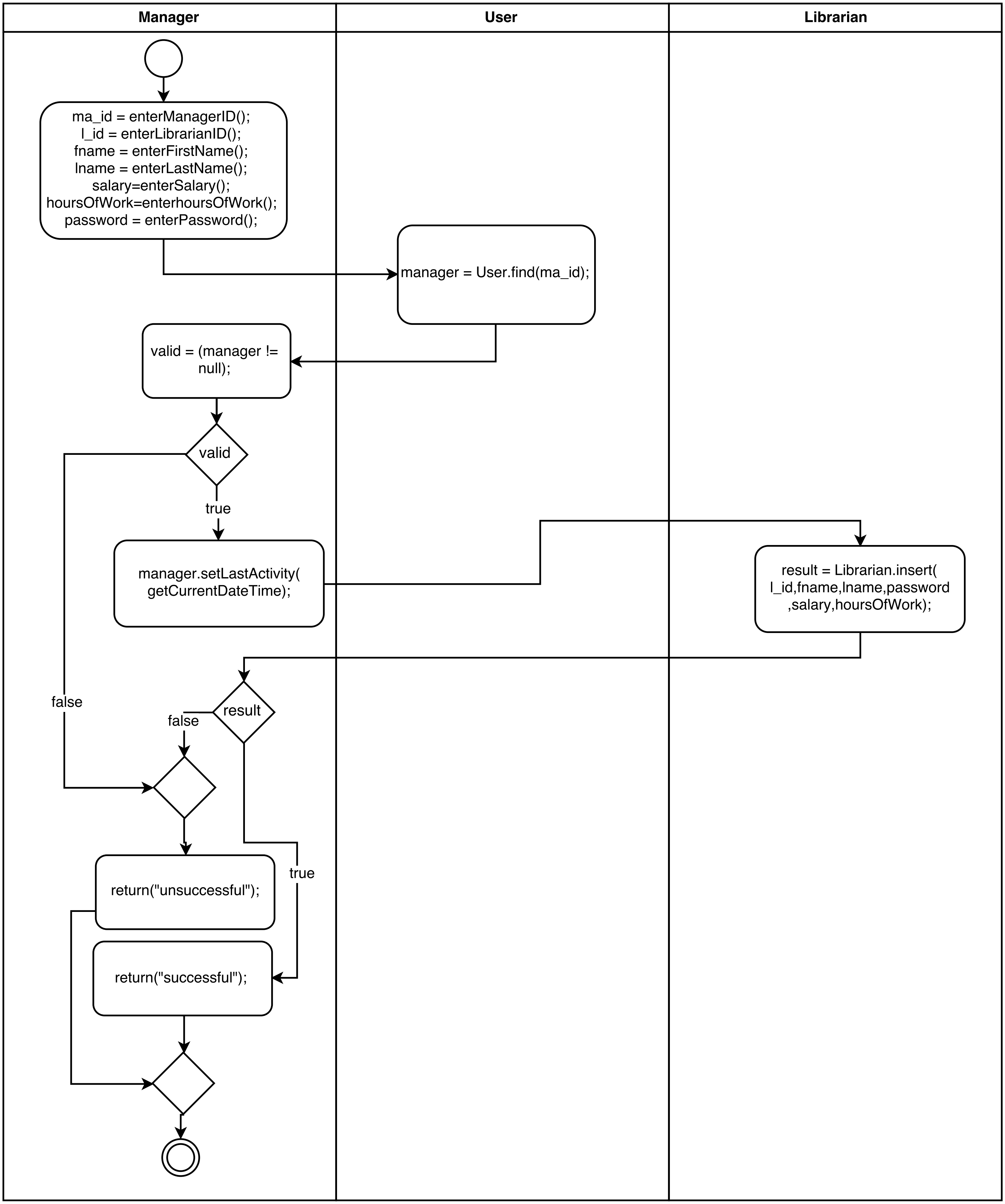
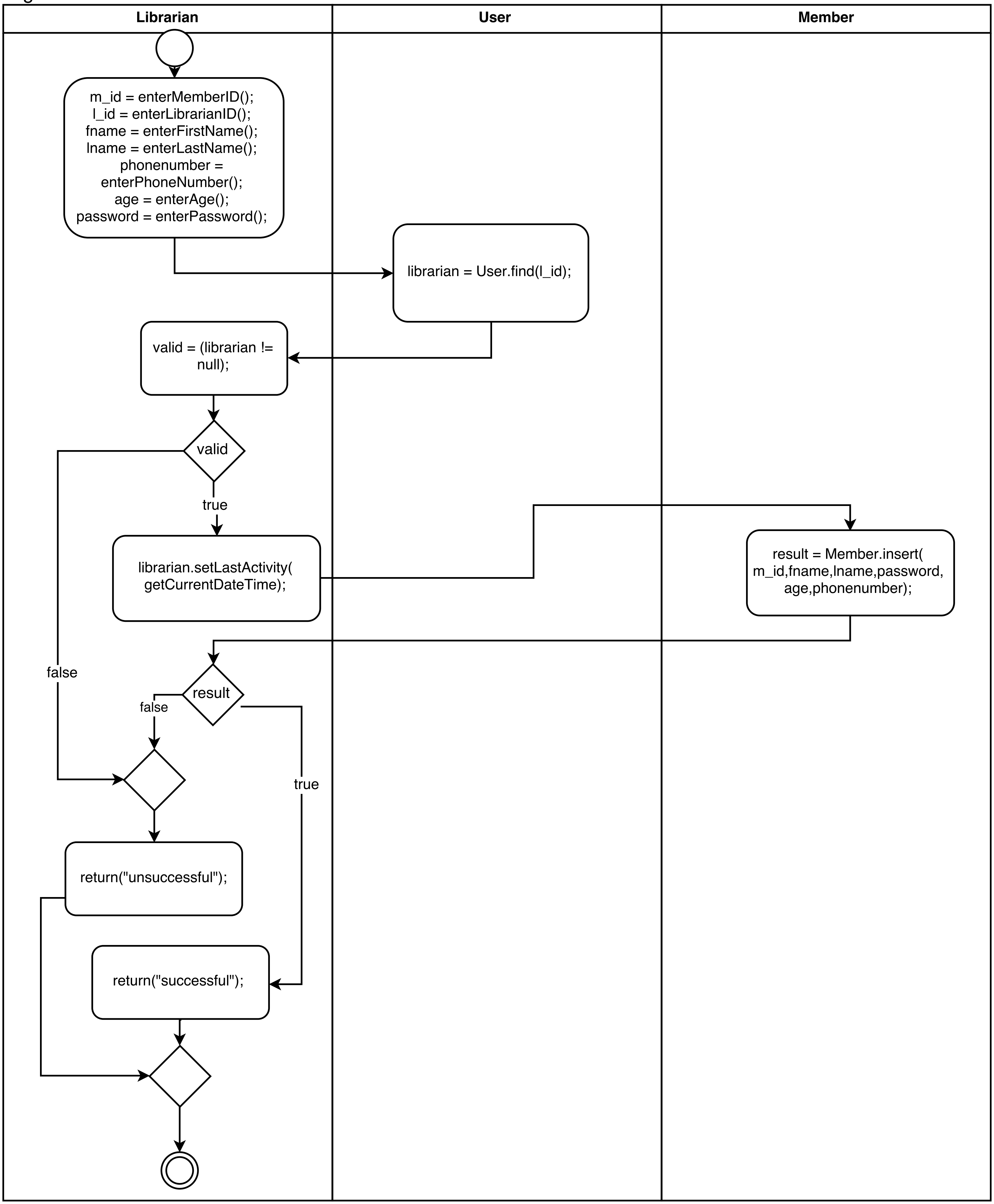
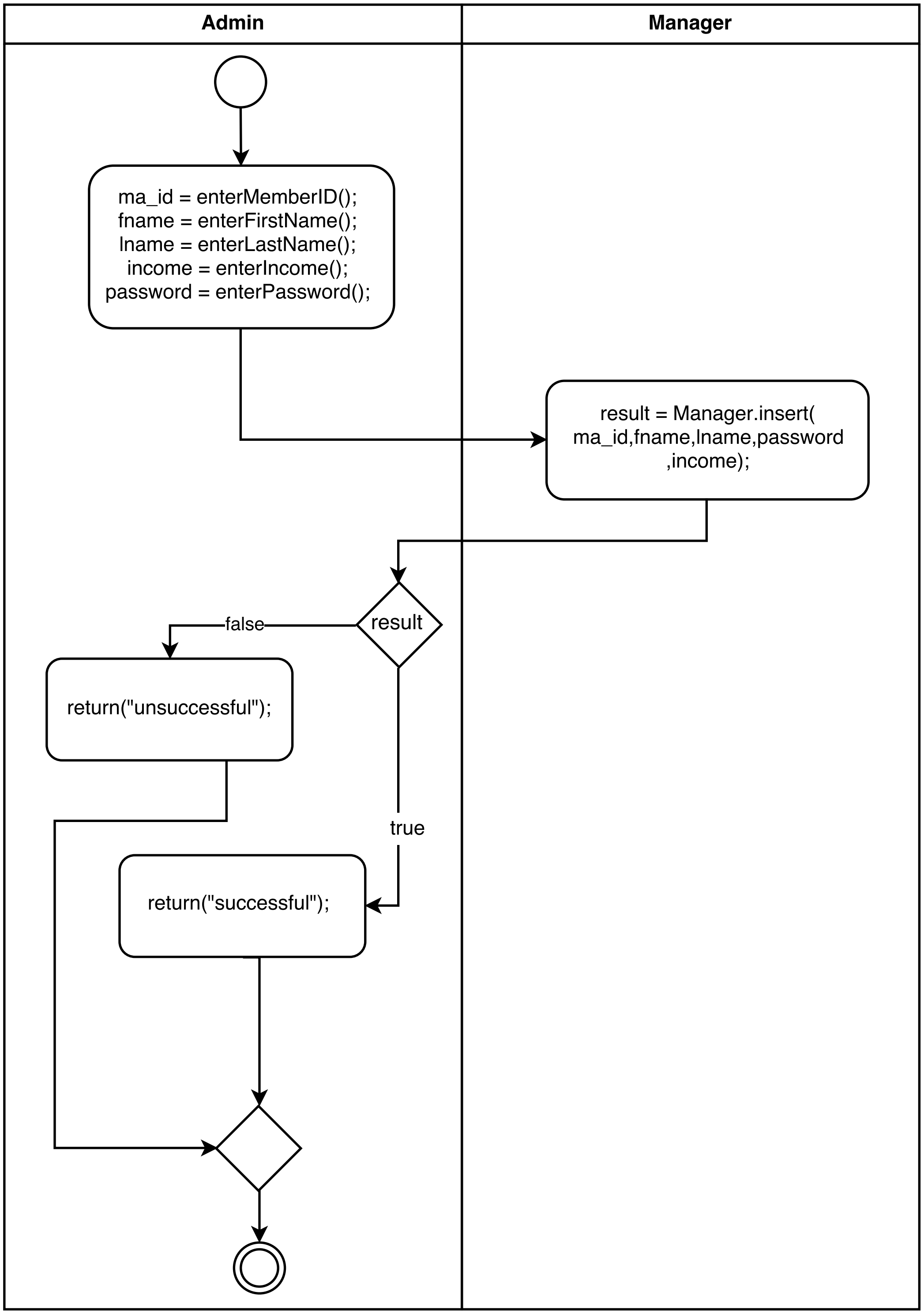
hire librarian


Manager
User
Librarian
ma_id = enterManagerID();
l_id = enterLibrarianID();
fname = enterFirstName();
lname = enterLastName();
salary=enterSalary();
hoursOfWork=enterhoursOfWork();
password = enterPassword();
manager = User.find(ma_id);
valid = (manager != null);
valid
true
manager.setLastActivity(getCurrentDateTime);
result = Librarian.insert(l_id,fname,lname,password ,salary,hoursOfWork);
false
result
false
true
return("unsuccessful");
return("successful");

register member



register manager



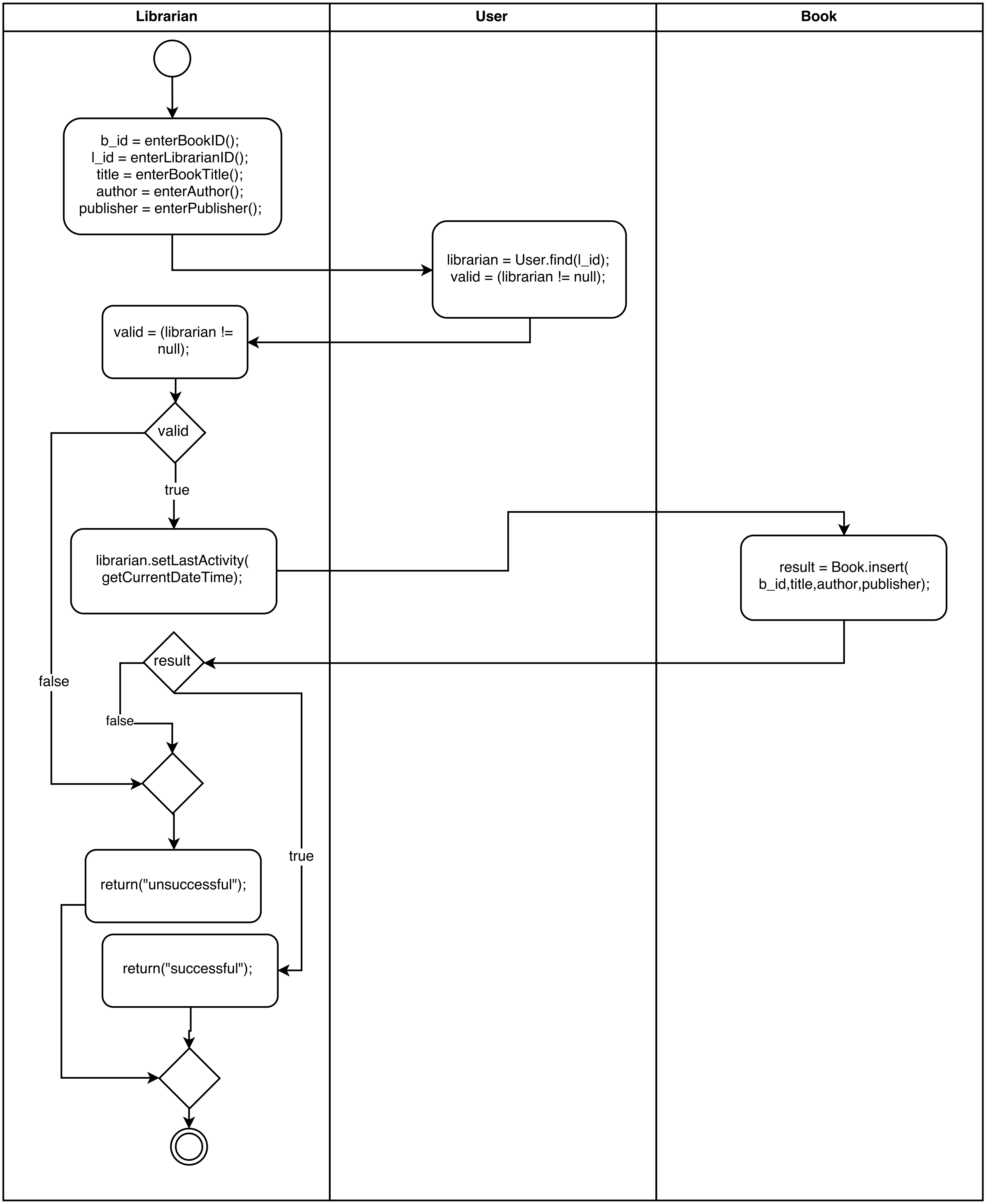
```
ma_id = enterMemberID();
fname = enterFirstName();
lname = enterLastName();
income = enterIncome();
password = enterPassword();
```

```
result = Manager.insert(
ma_id,fname,lname,password
,income);
```

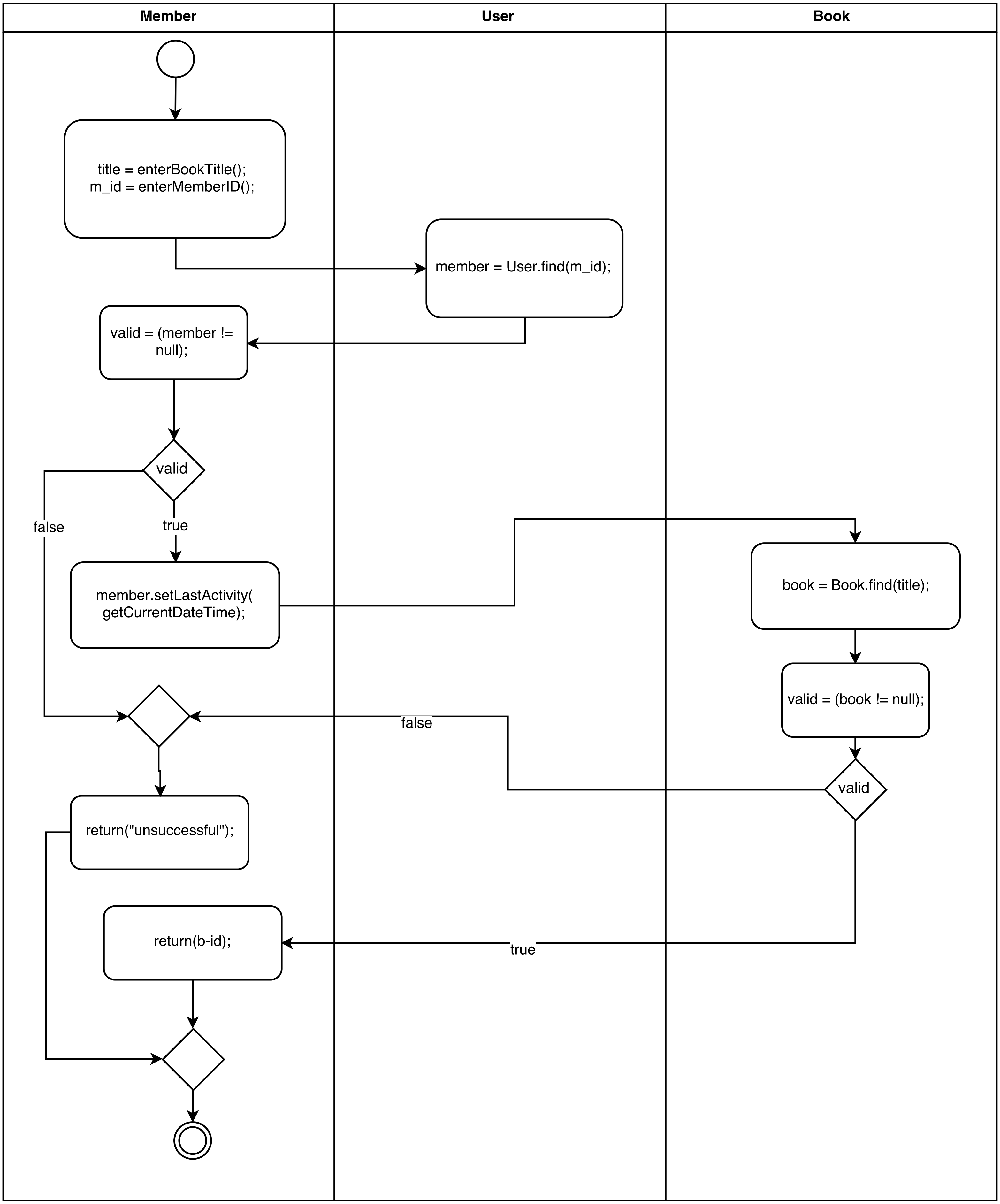
```
return("unsuccessful");
```

```
return("successful");
```

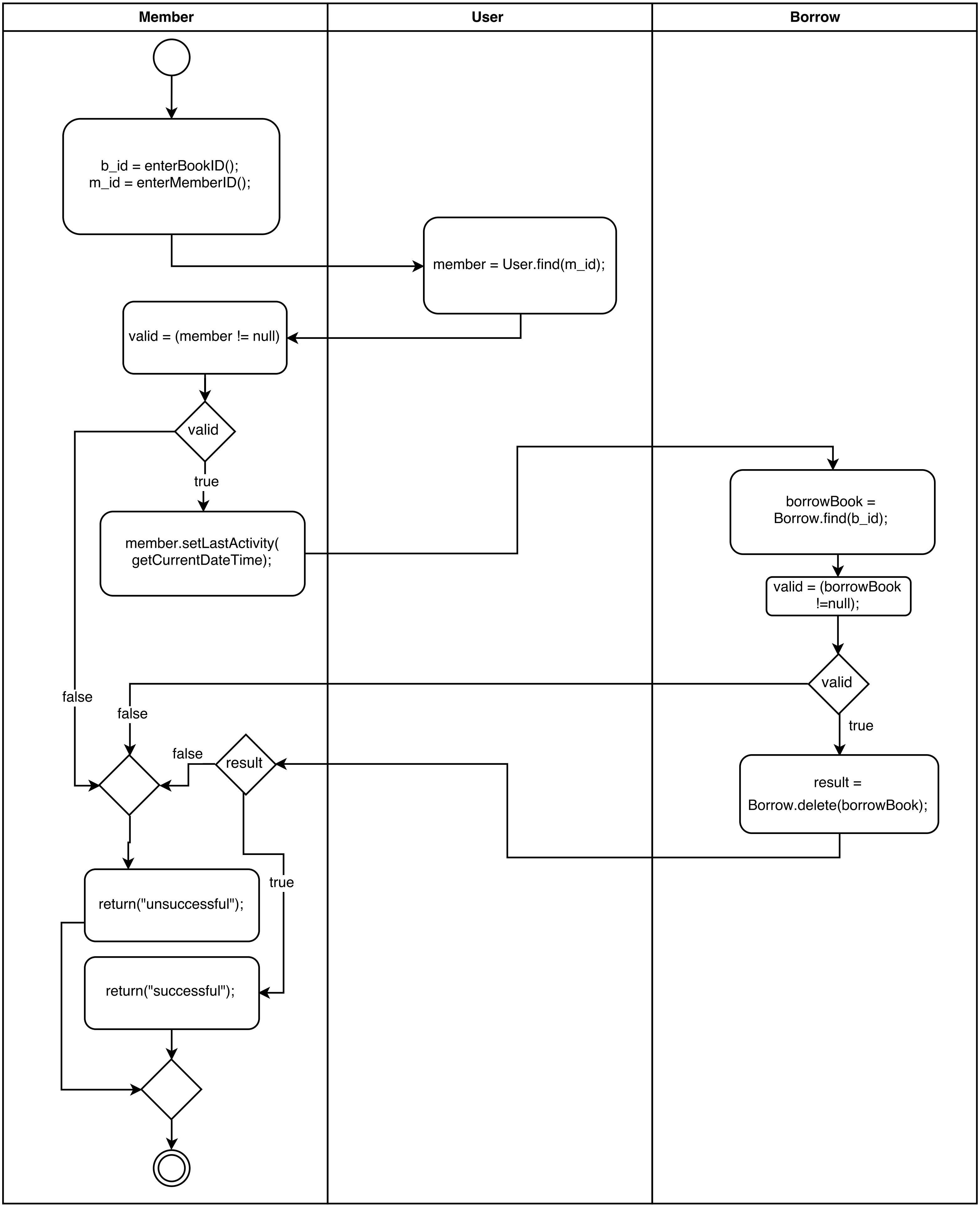
Add book


Librarian
User
Book
b_id = enterBookID();
l_id = enterLibrarianID();
title = enterBookTitle();
author = enterAuthor();
publisher = enterPublisher();
librarian = User.find(l_id);
valid = (librarian != null);
valid = (librarian != null);
valid
true
false
librarian.setLastActivity(
getCurrentDateTime);
result = Book.insert(
b_id,title,author,publisher);
result
false
true
return("unsuccessful");
return("successful");

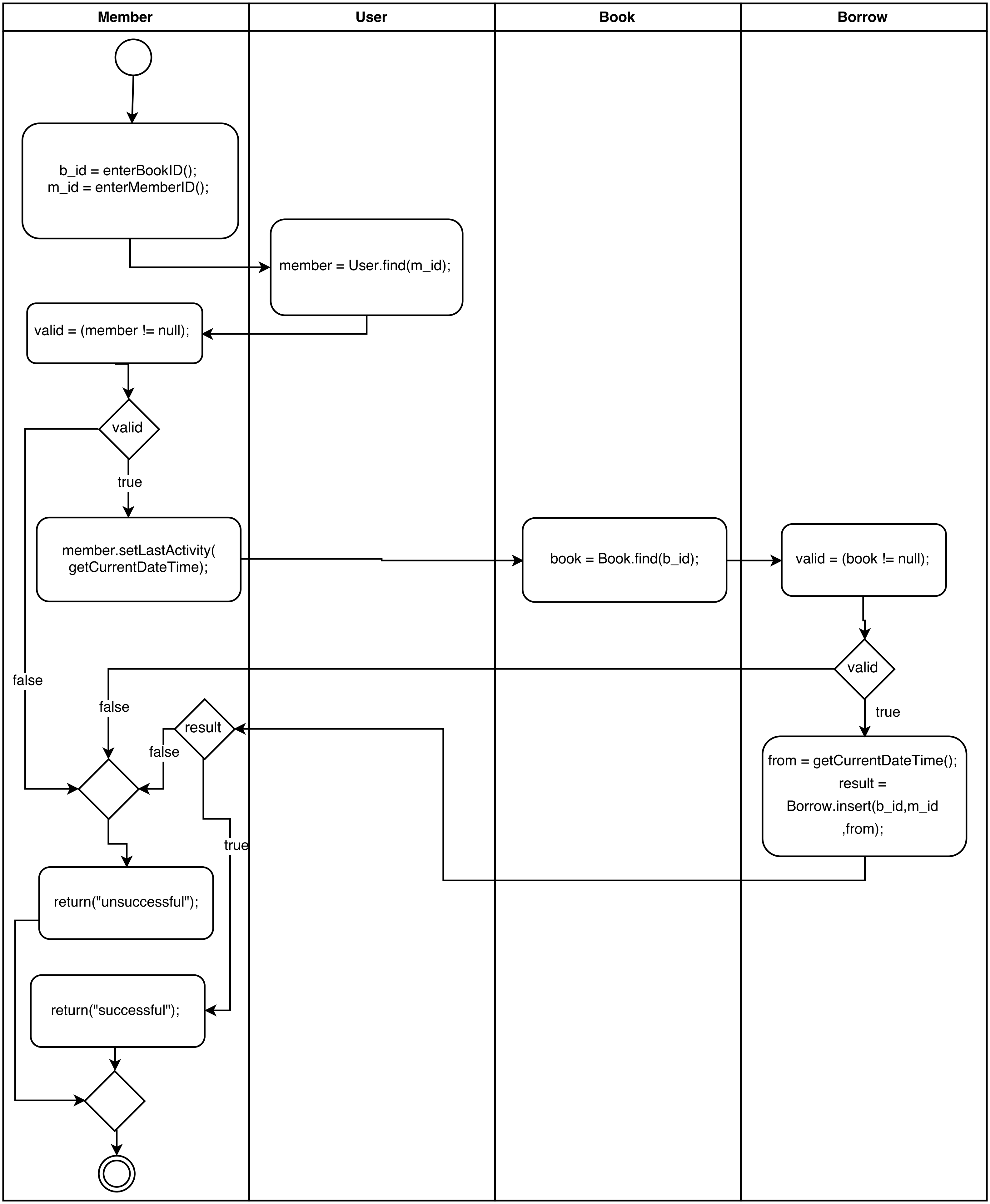
search book


Member
User
Book
title = enterBookTitle();
m_id = enterMemberID();
member = User.find(m_id);
valid = (member != null);
valid
false
true
member.setLastActivity(getCurrentDateTime);
book = Book.find(title);
valid = (book != null);
valid
false
return("unsuccessful");
return(b-id);
true

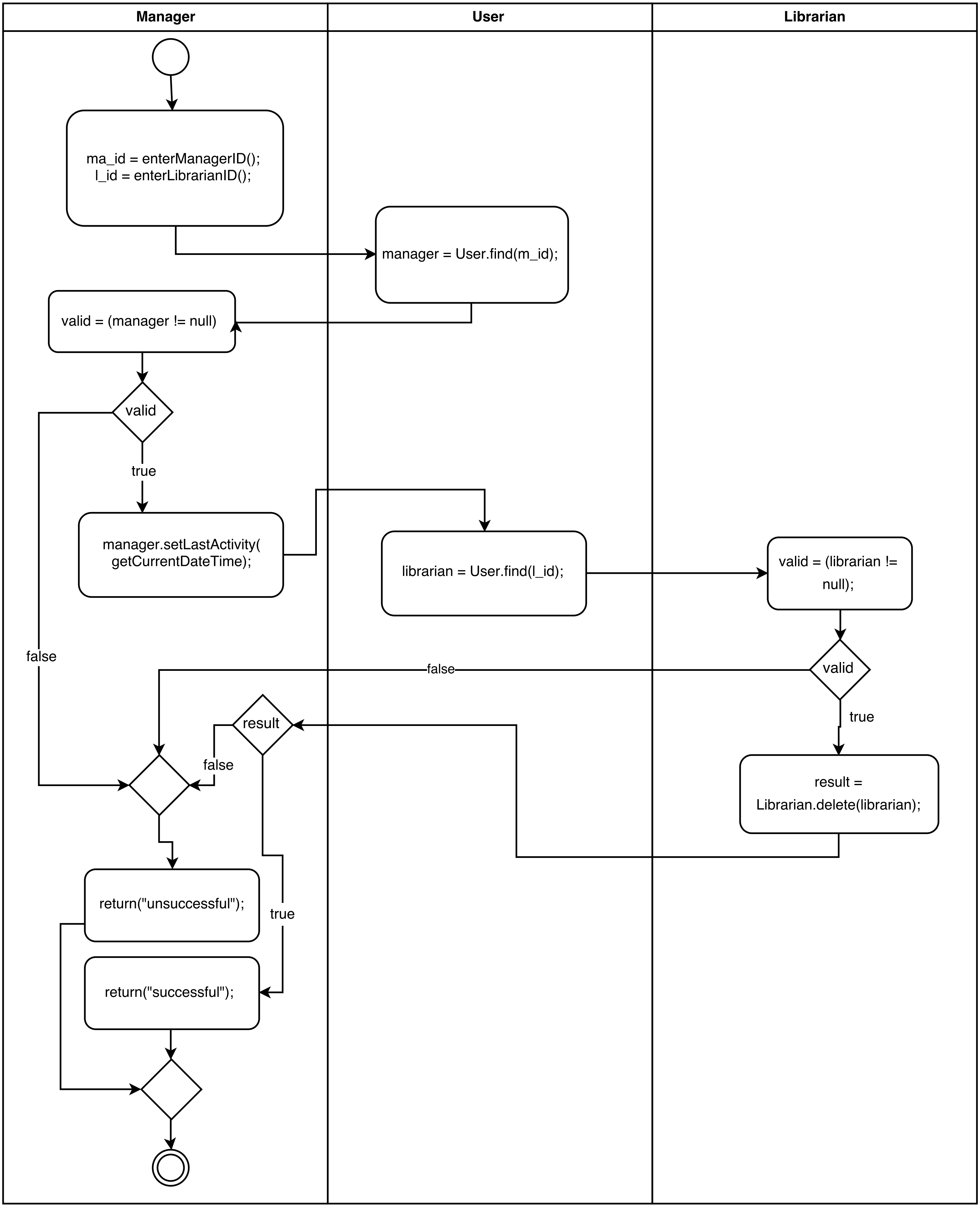
Return book


Member
User
Borrow
b_id = enterBookID();
m_id = enterMemberID();
member = User.find(m_id);
valid = (member != null)
valid
true
false
member.setLastActivity(
getCurrentDateTime);
borrowBook =
Borrow.find(b_id);
valid = (borrowBook
!=null);
valid
false
true
result =
Borrow.delete(borrowBook);
result
false
true
return("unsuccessful");
return("successful");

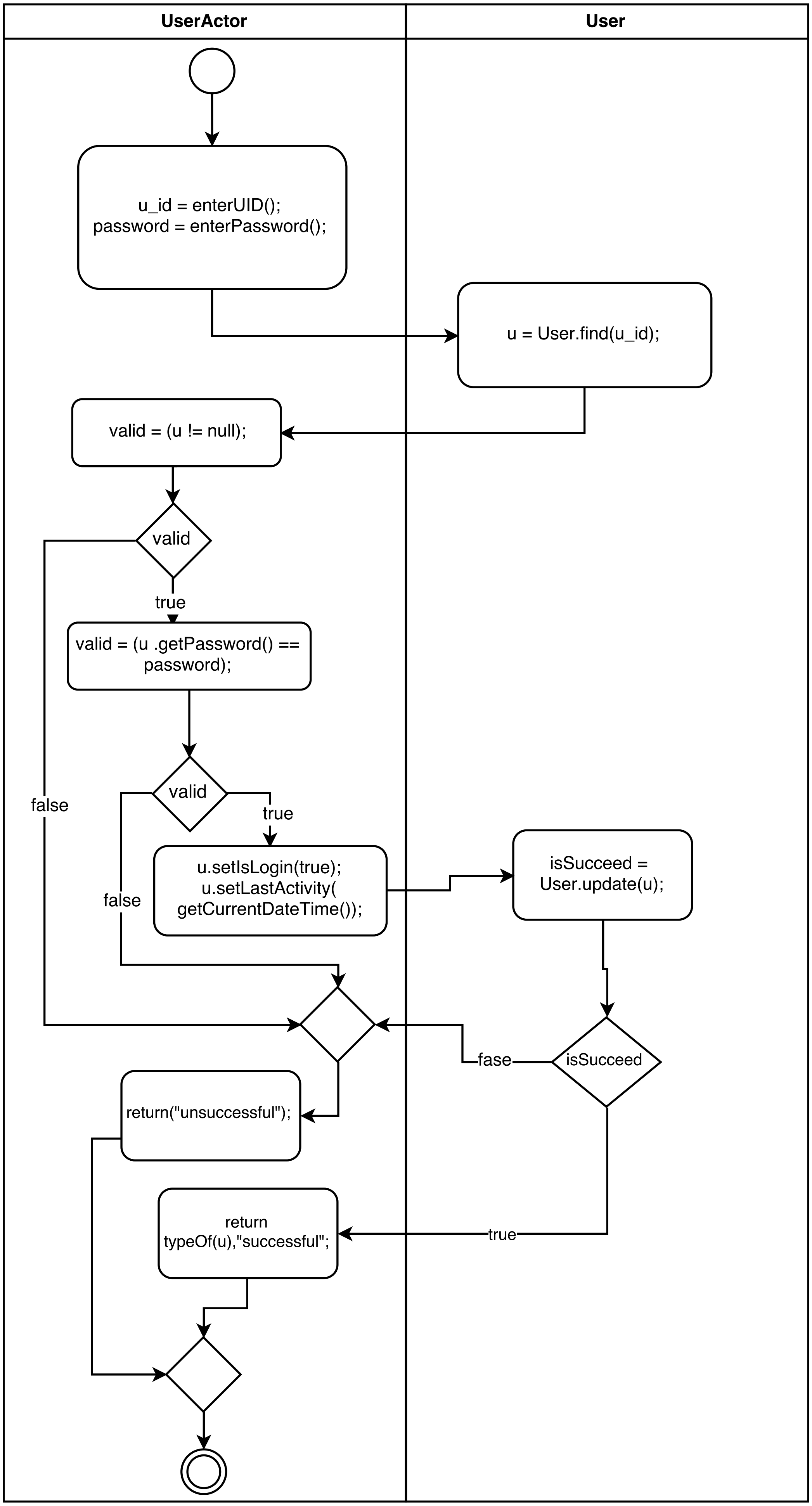
request book



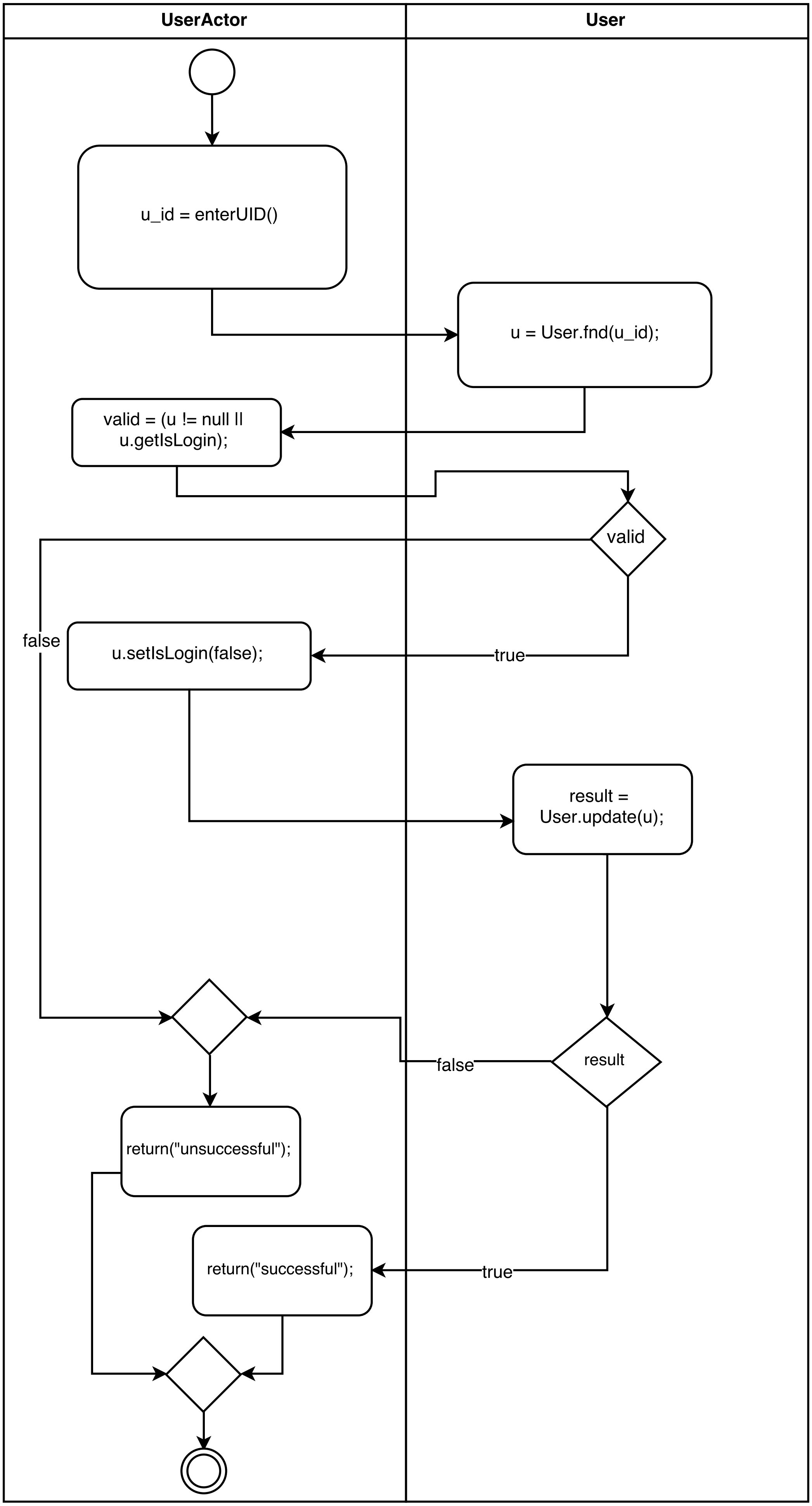
Fire librarian


Manager
User
Librarian
ma_id = enterManagerID();
l_id = enterLibrarianID();
manager = User.find(m_id);
valid = (manager != null)
valid
true
false
manager.setLastActivity(
getCurrentDateTime);
librarian = User.find(l_id);
valid = (librarian != null);
valid
false
true
result =
Librarian.delete(librarian);
result
false
true
return("unsuccessful");
return("successful");

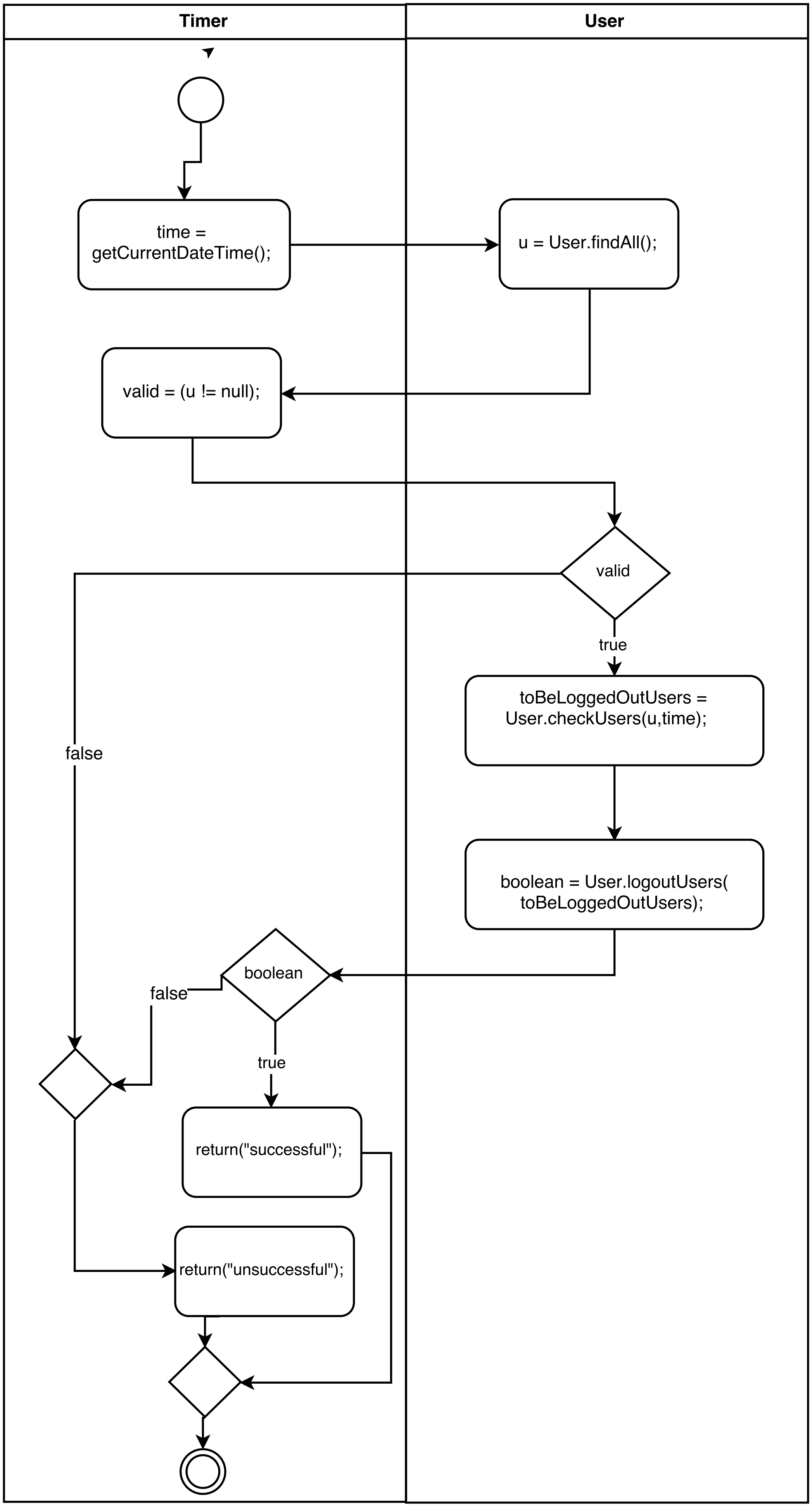
Login


UserActor
User
u_id = enterUID();
password = enterPassword();
u = User.find(u_id);
valid = (u != null);
valid
true
false
valid = (u .getPassword() == password);
valid
true
false
u.setIsLogin(true);
u.setLastActivity(
getCurrentDateTime());
isSucceed =
User.update(u);
isSucceed
fase
return("unsuccessful");
return
typeOf(u),"successful";
true

Logout


UserActor
User
u_id = enterUID()
u = User.fnd(u_id);
valid = (u != null ll u.getIsLogin);
valid
false
true
u.setIsLogin(false);
result = User.update(u);
result
false
return("unsuccessful");
true
return("successful");

kickout


Timer
User
time = getCurrentDateTime();
u = User.findAll();
valid = (u != null);
valid
true
false
toBeLoggedOutUsers = User.checkUsers(u,time);
boolean = User.logoutUsers(toBeLoggedOutUsers);
boolean
false
true
return("successful");
return("unsuccessful");