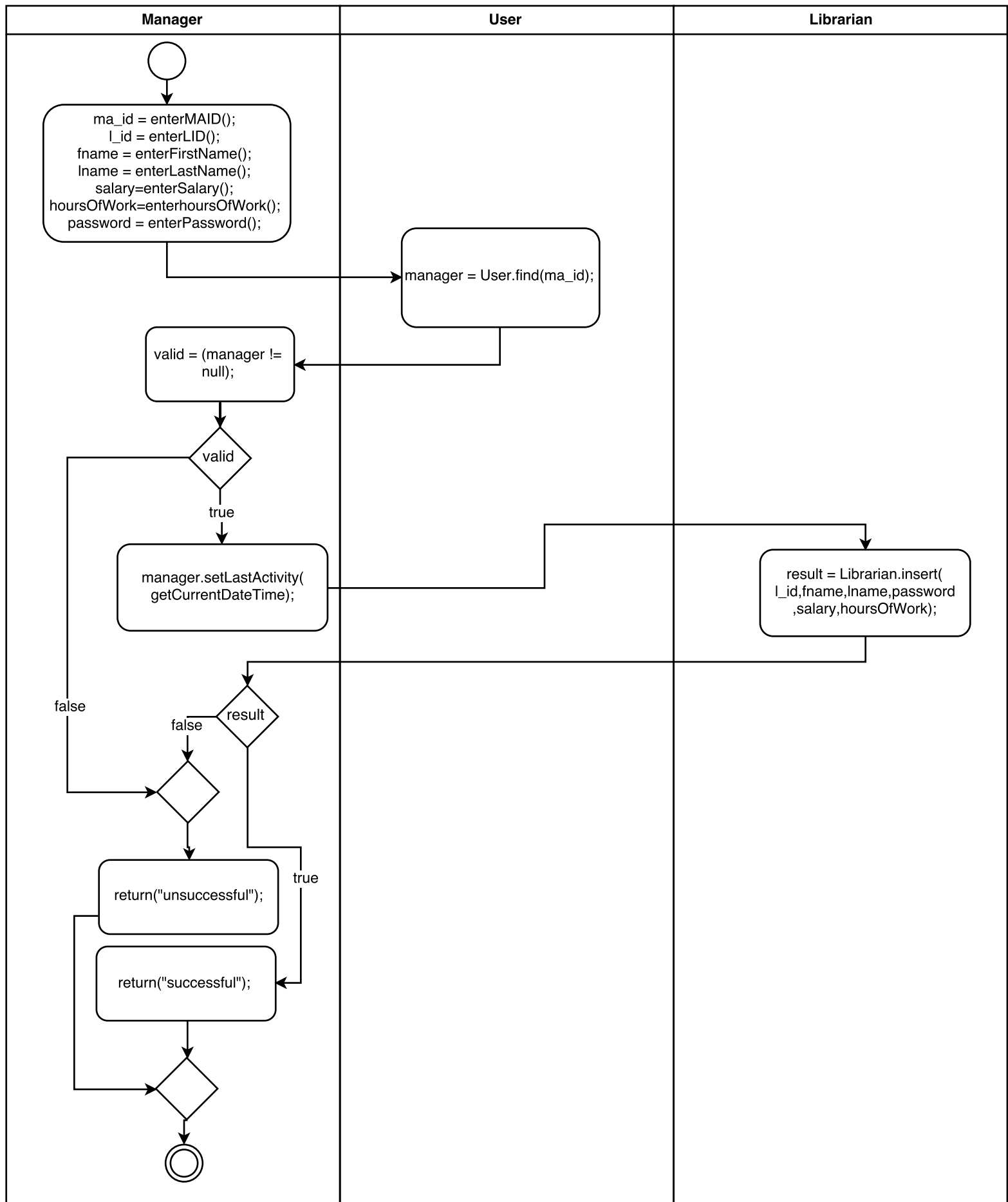
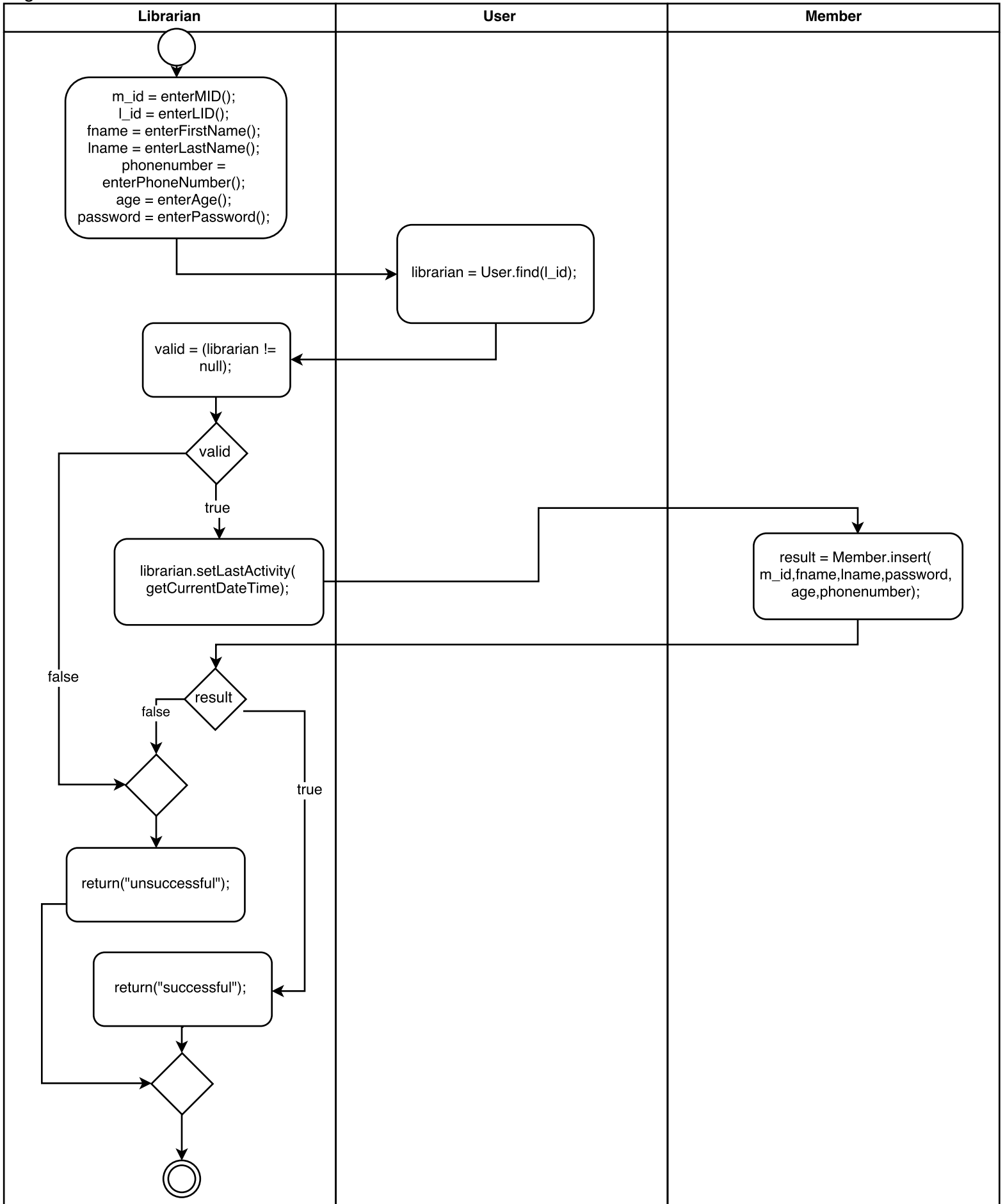


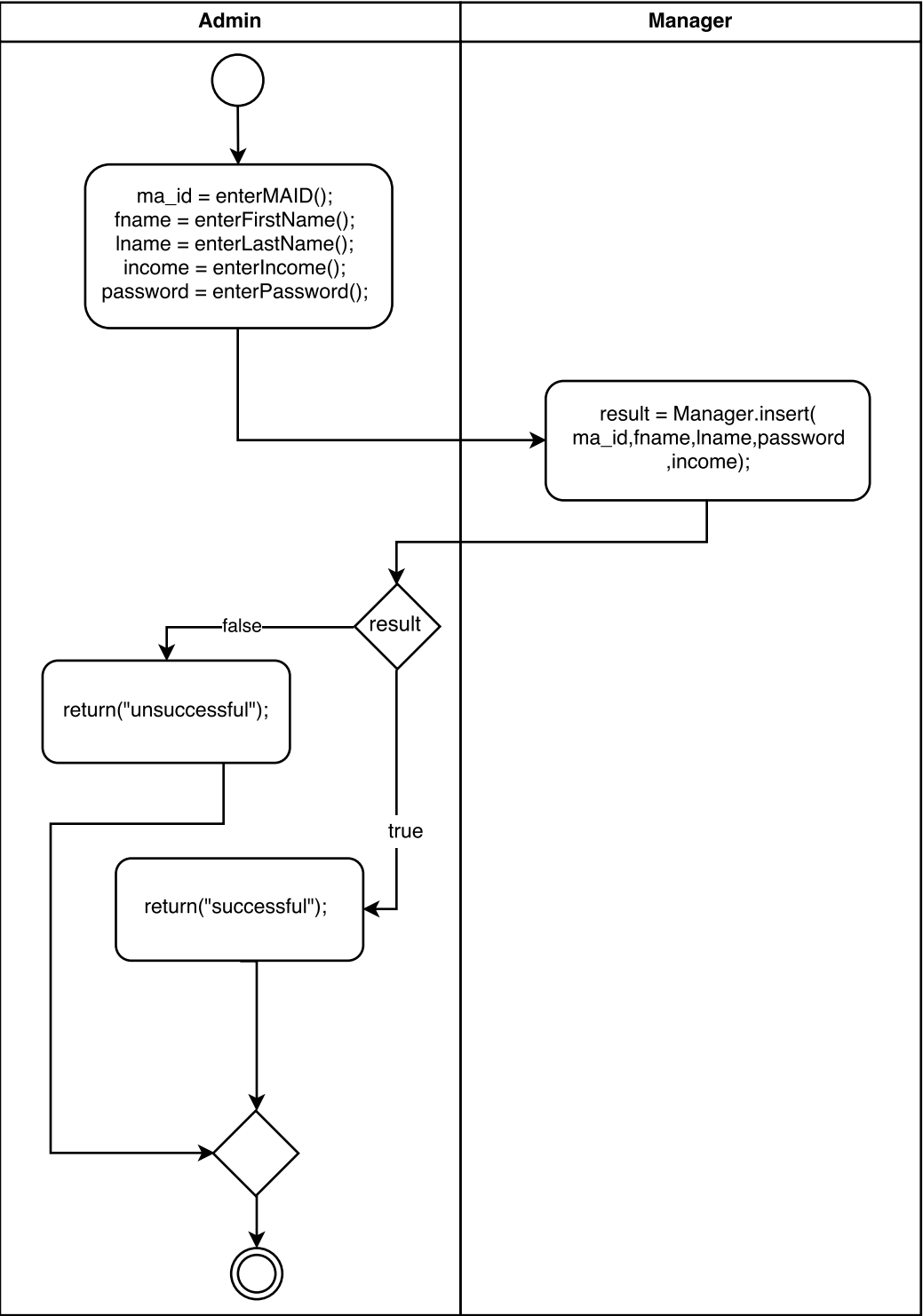
hire librarian



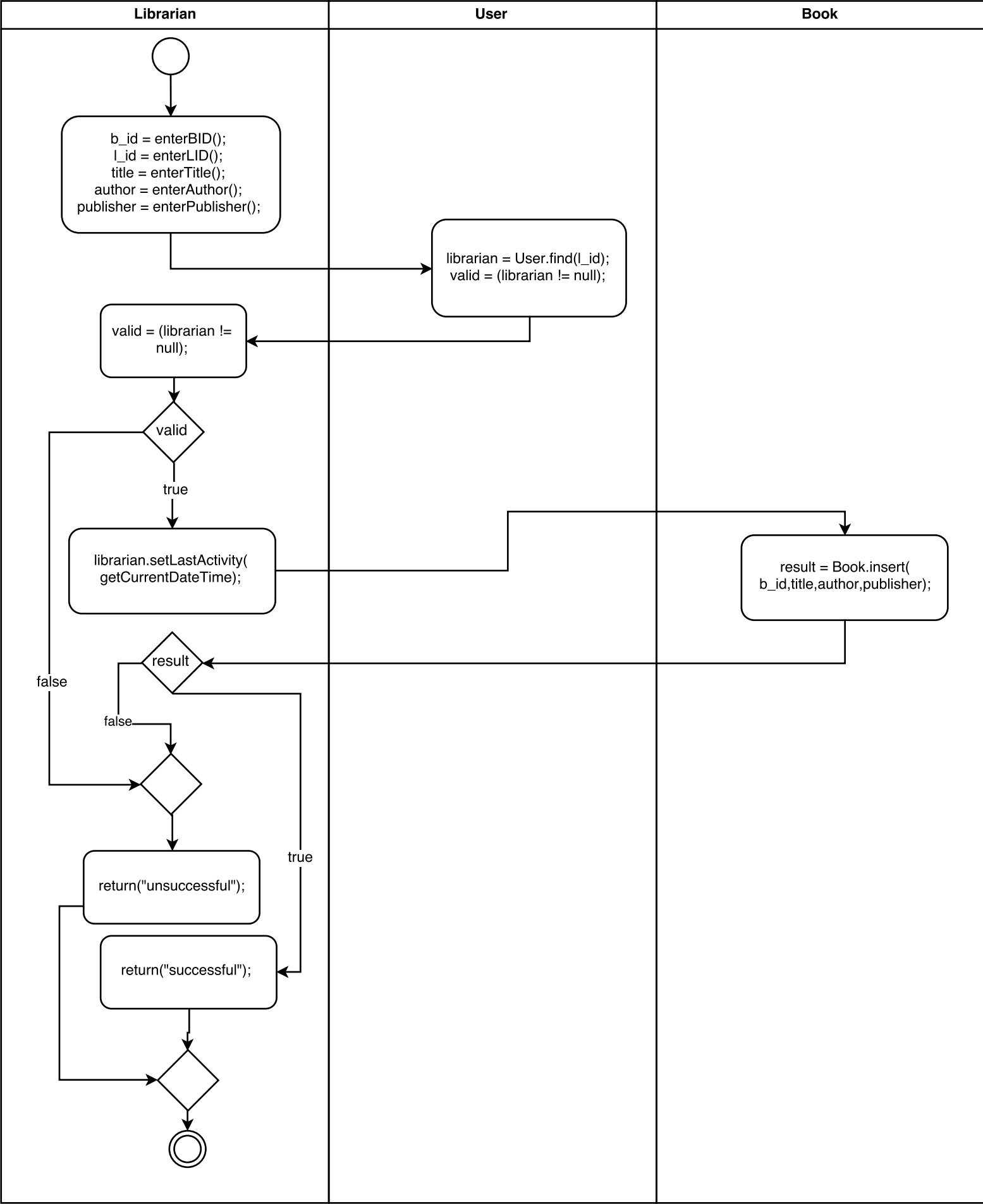
register member



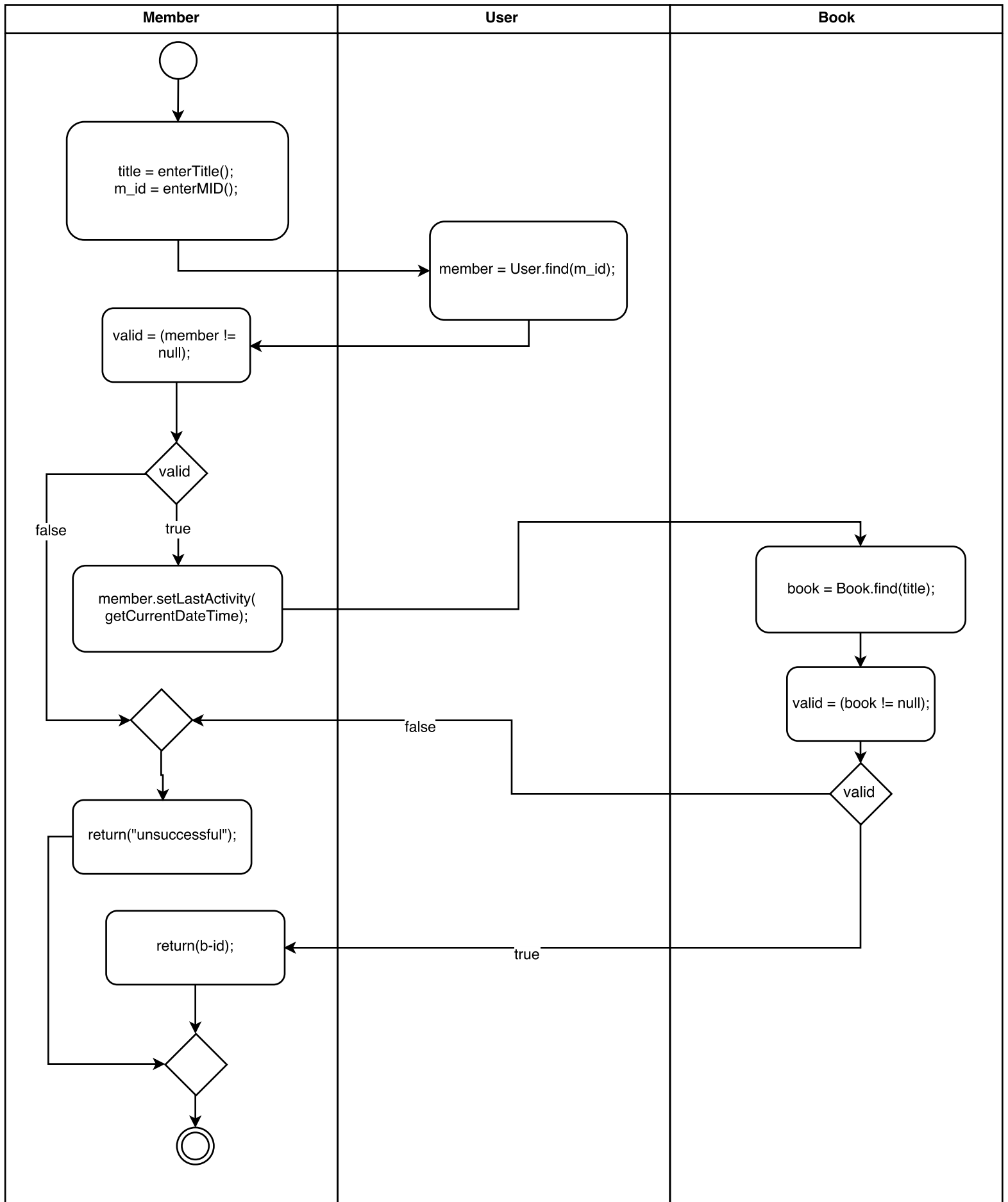
register manager



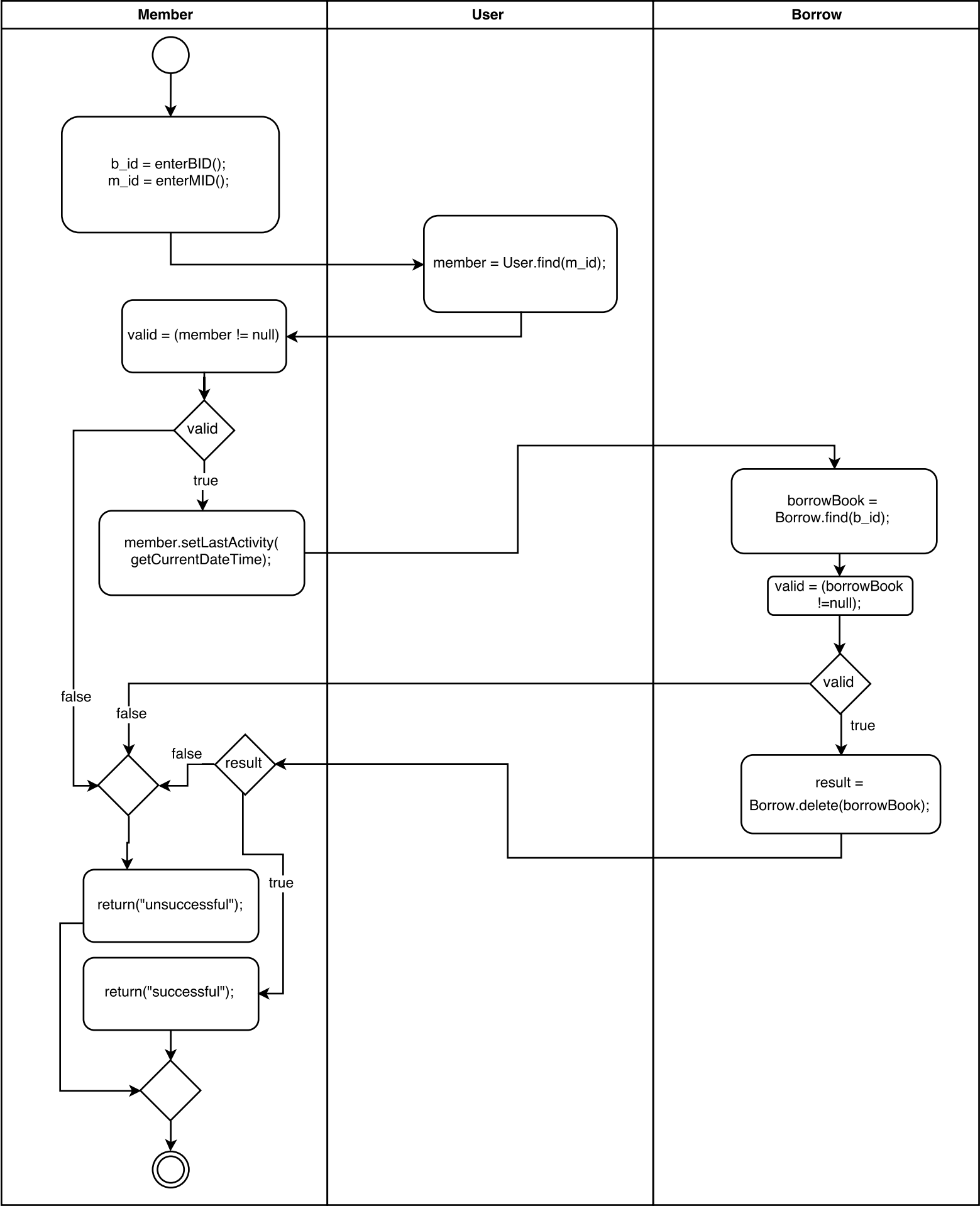
Add book



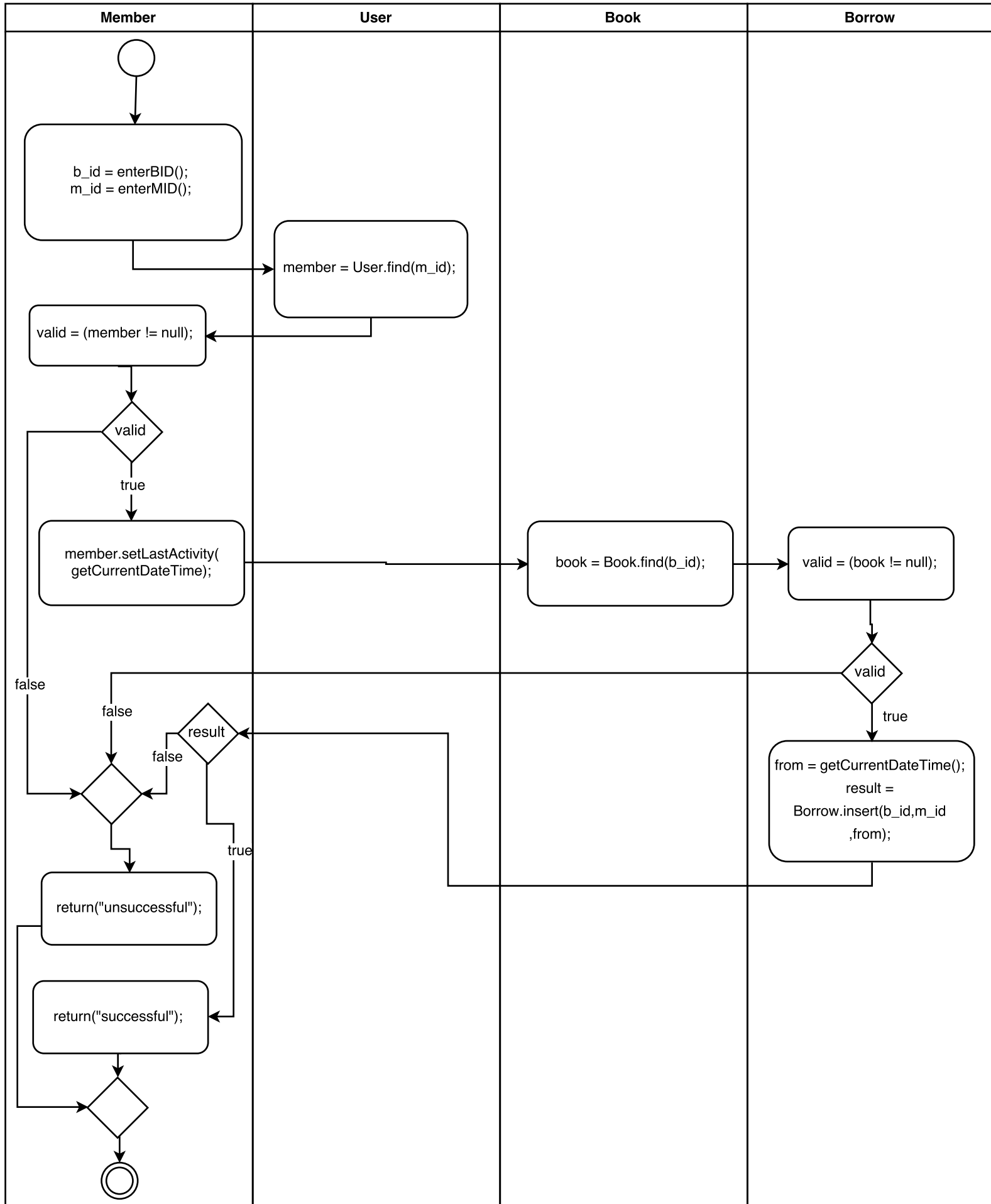
search book



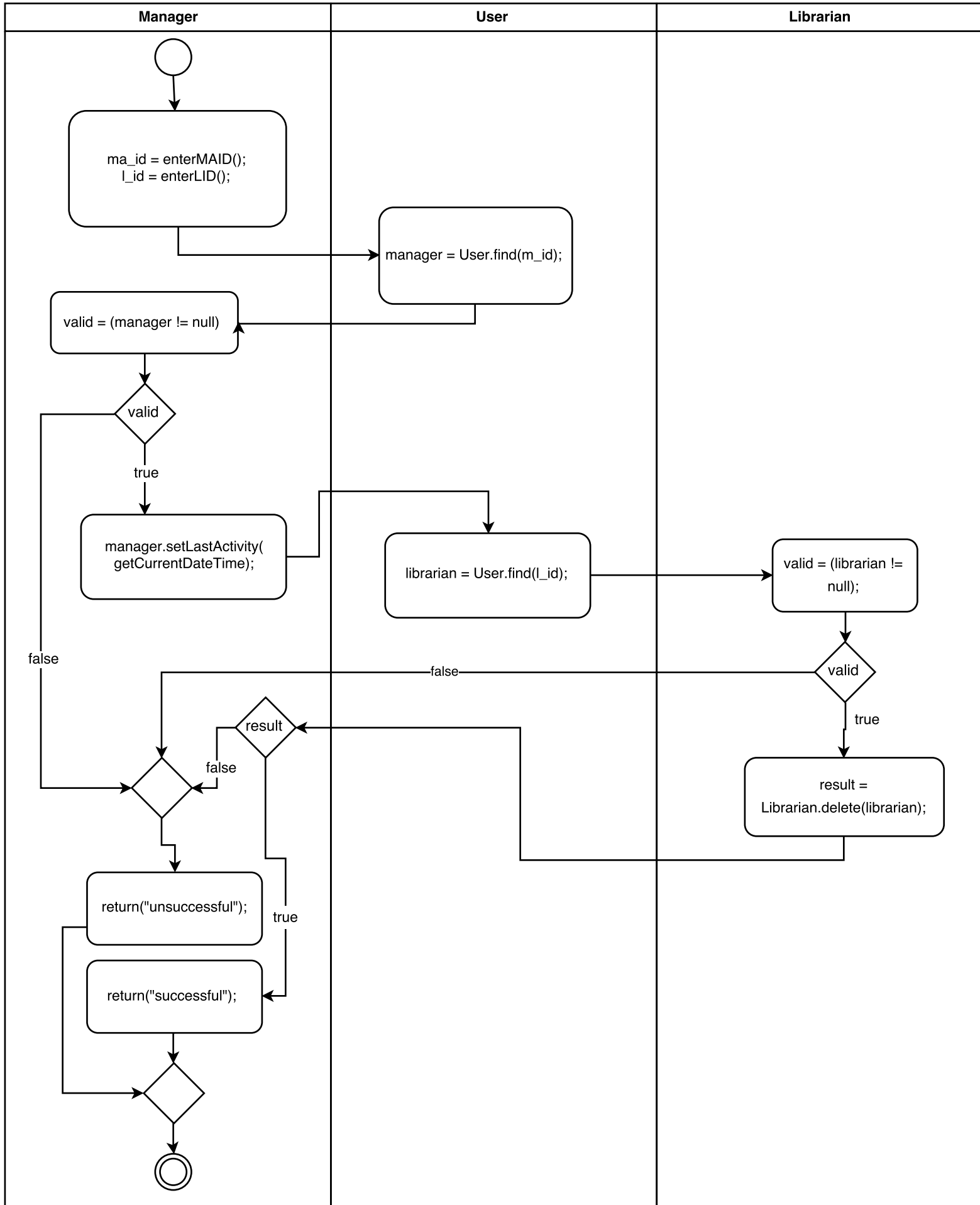
Return book



request book



Fire librarian

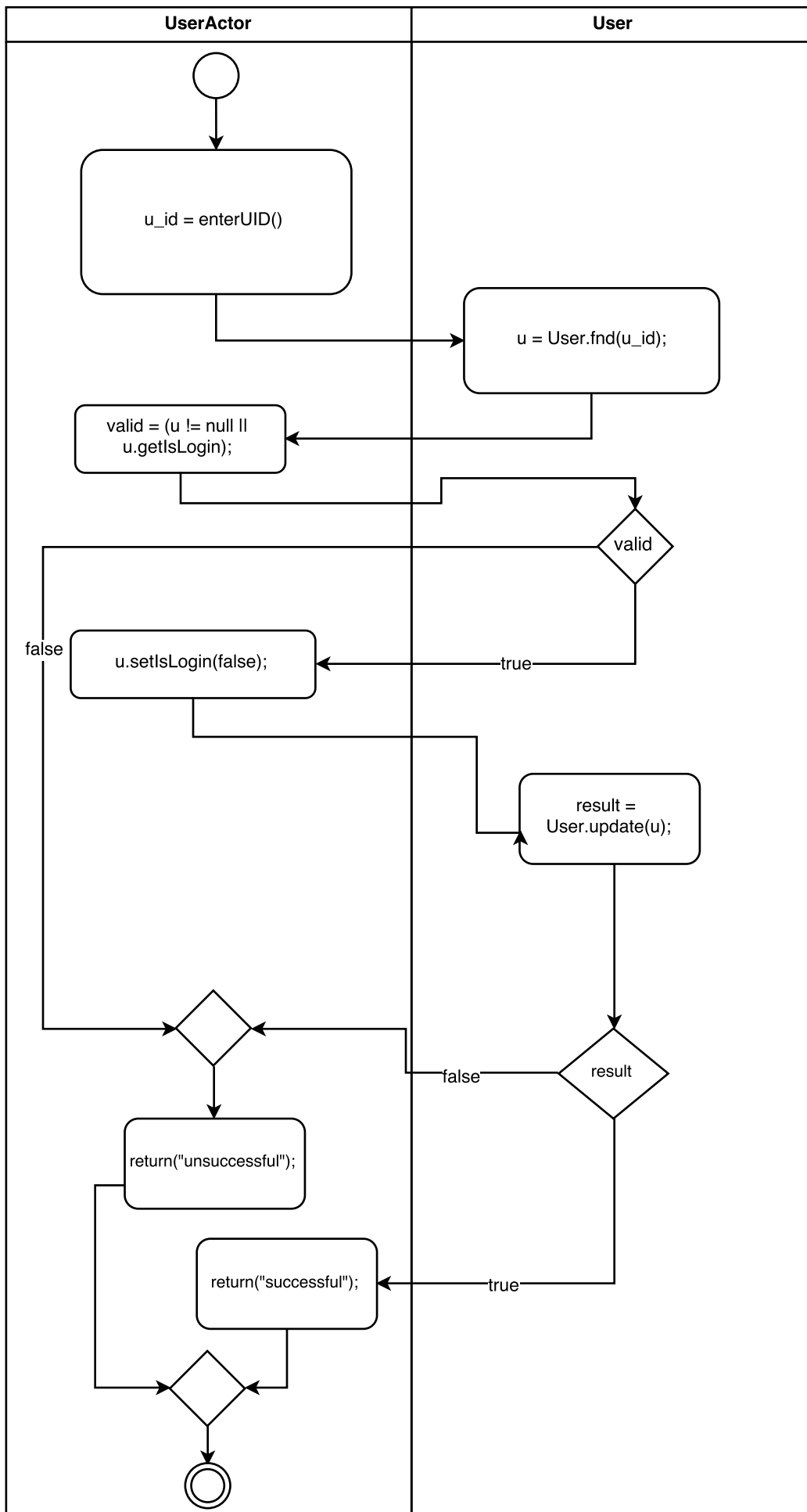



```

sequenceDiagram
    participant UserActor
    participant User

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

Logout



```

graph TD
    subgraph Timer
        Start(( )) --> GetTime[time = getCurrentDateTime();]
        GetTime --> ValidCheck[valid = (u != null);]
        ValidCheck --> Decision1{ }
        Decision1 -- false --> ReturnUnsuccessful[return("unsuccessful");]
        ReturnUnsuccessful --> Decision2{ }
        Decision2 --> End((( )))
    end

    subgraph User
        FindAll[u = User.findAll();]
        CheckUsers[toBeLoggedOutUsers = User.checkUsers(u,time);]
        LogoutUsers[boolean = User.logoutUsers(toBeLoggedOutUsers);]
    end

    GetTime --> FindAll
    FindAll --> ValidCheck
    ValidCheck --> Decision1
    Decision1 -- true --> CheckUsers
    CheckUsers --> LogoutUsers
    LogoutUsers --> Decision1
    Decision1 -- true --> Decision2
    Decision2 -- true --> ReturnSuccessful[return("successful");]
    ReturnSuccessful --> Decision2

```