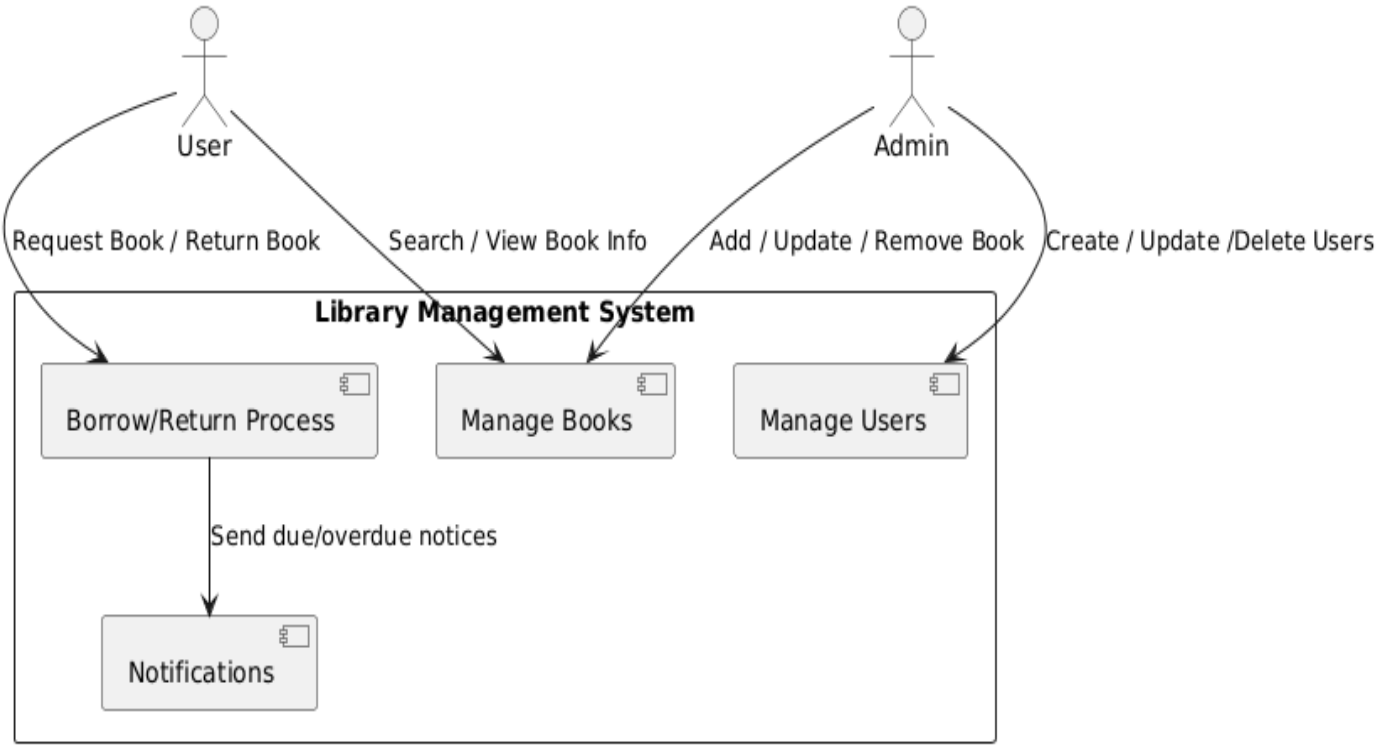
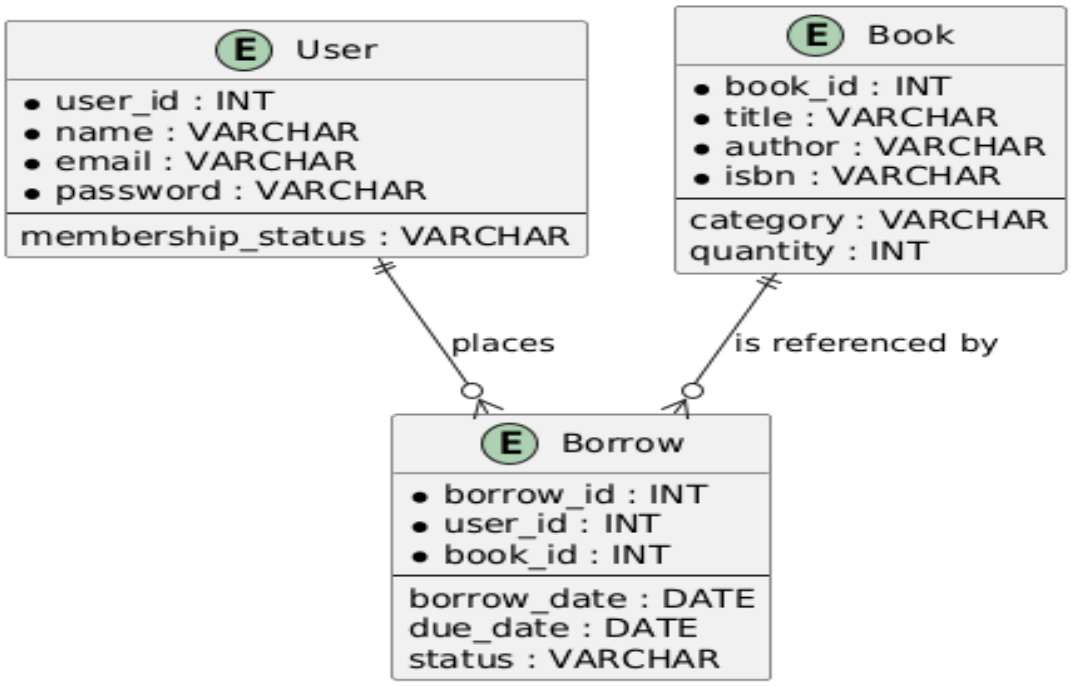
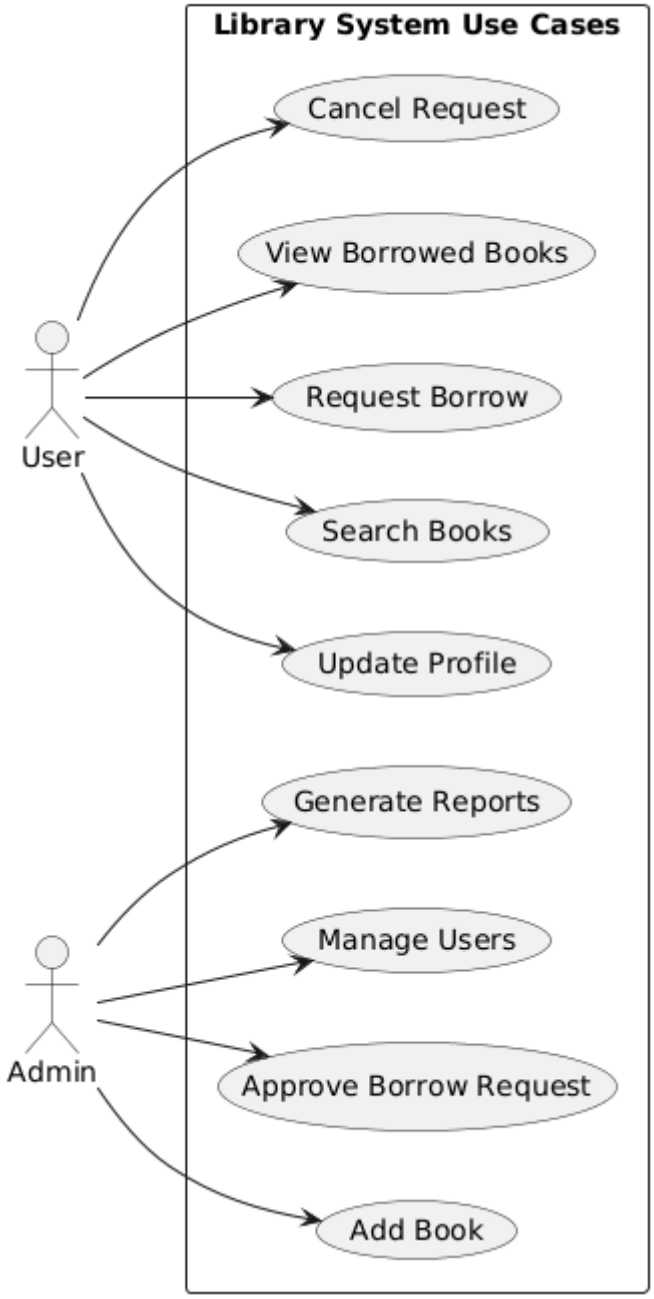
DFD - Context (Library Management System)

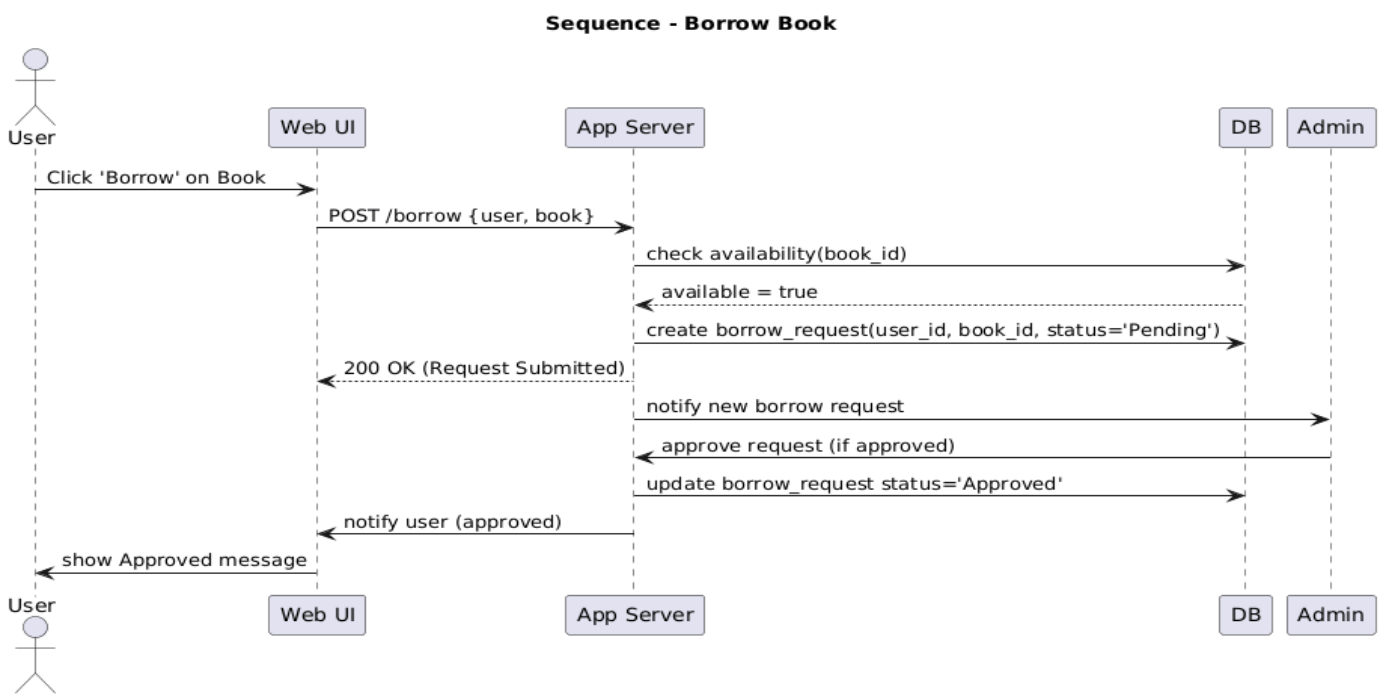


ER Diagram - Library Management System

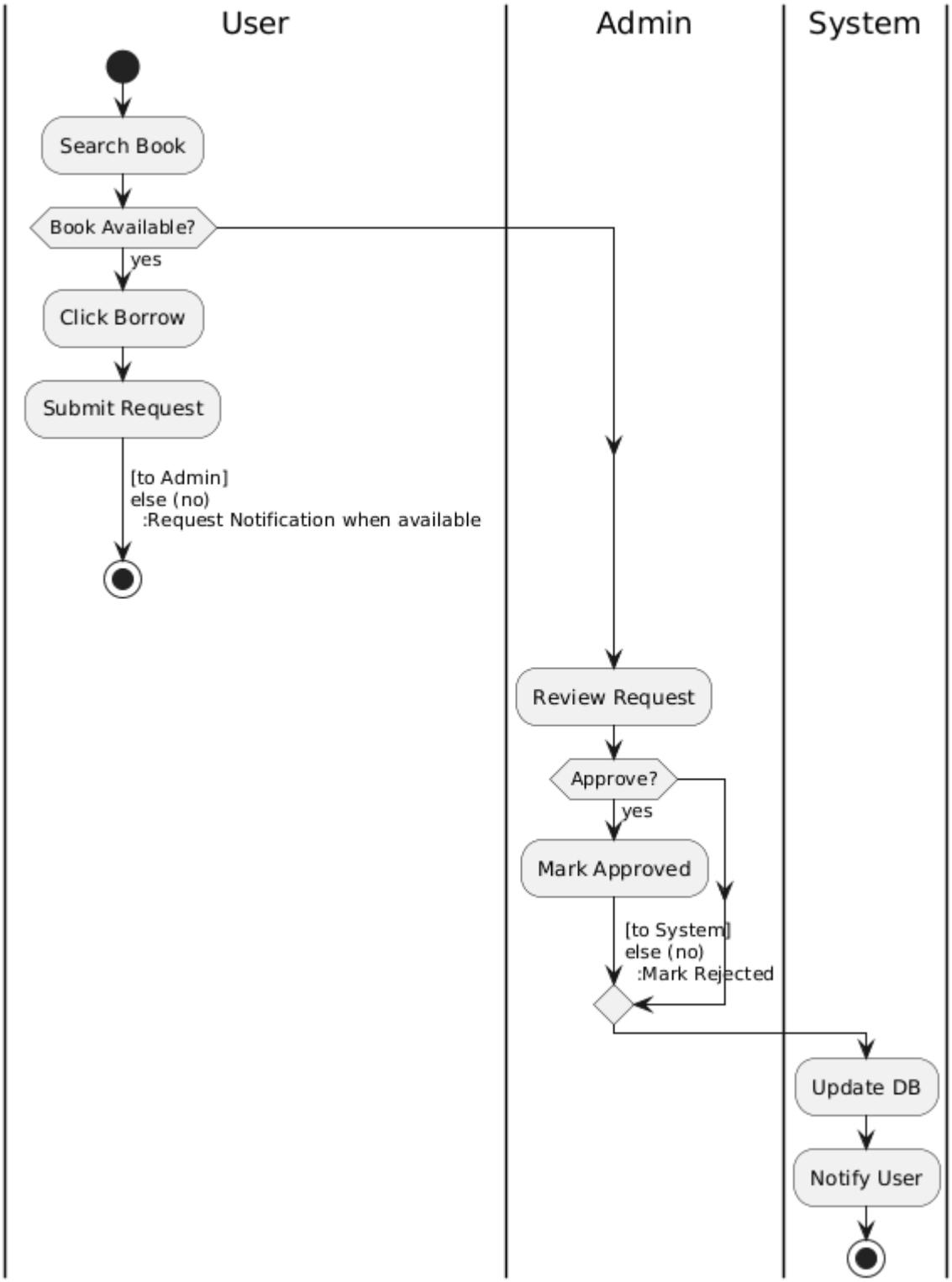
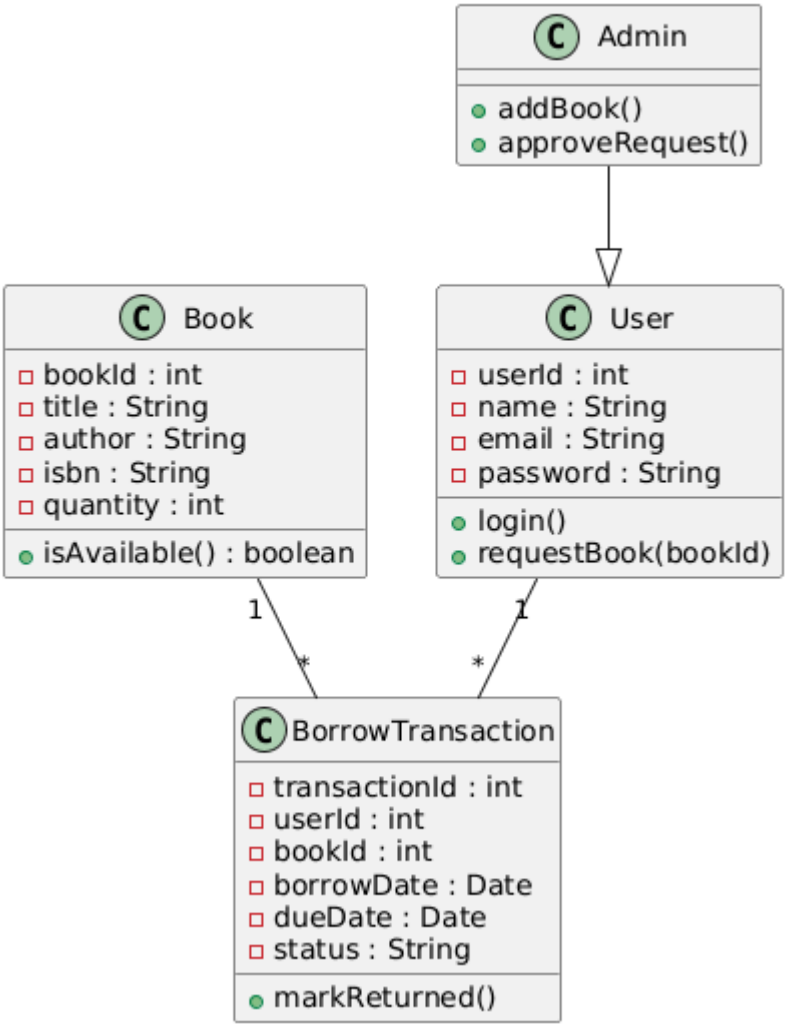


Use Case - Library Management System




Sequence - Borrow Book
User
Web UI
App Server
DB
Admin
Click 'Borrow' on Book
POST /borrow {user, book}
check availability(book_id)
available = true
create borrow_request(user_id, book_id, status='Pending')
200 OK (Request Submitted)
notify new borrow request
approve request (if approved)
update borrow_request status='Approved'
notify user (approved)
show Approved message
User
Web UI
App Server
DB
Admin

Activity Diagram — PlantUML (Borrow Request lifecycle)



Class Diagram - Library Management System