

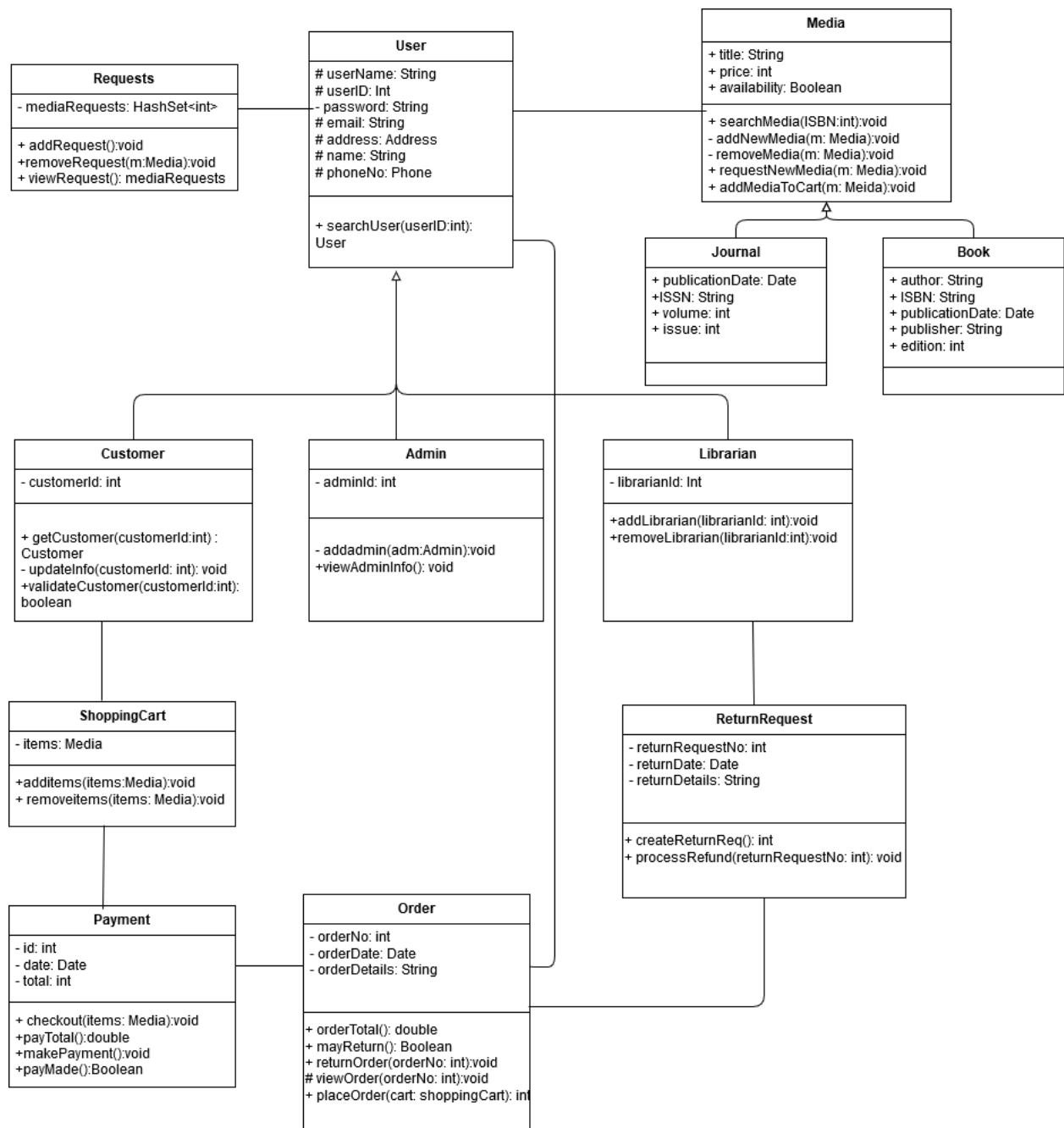
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Mukund Madhusudan Atre

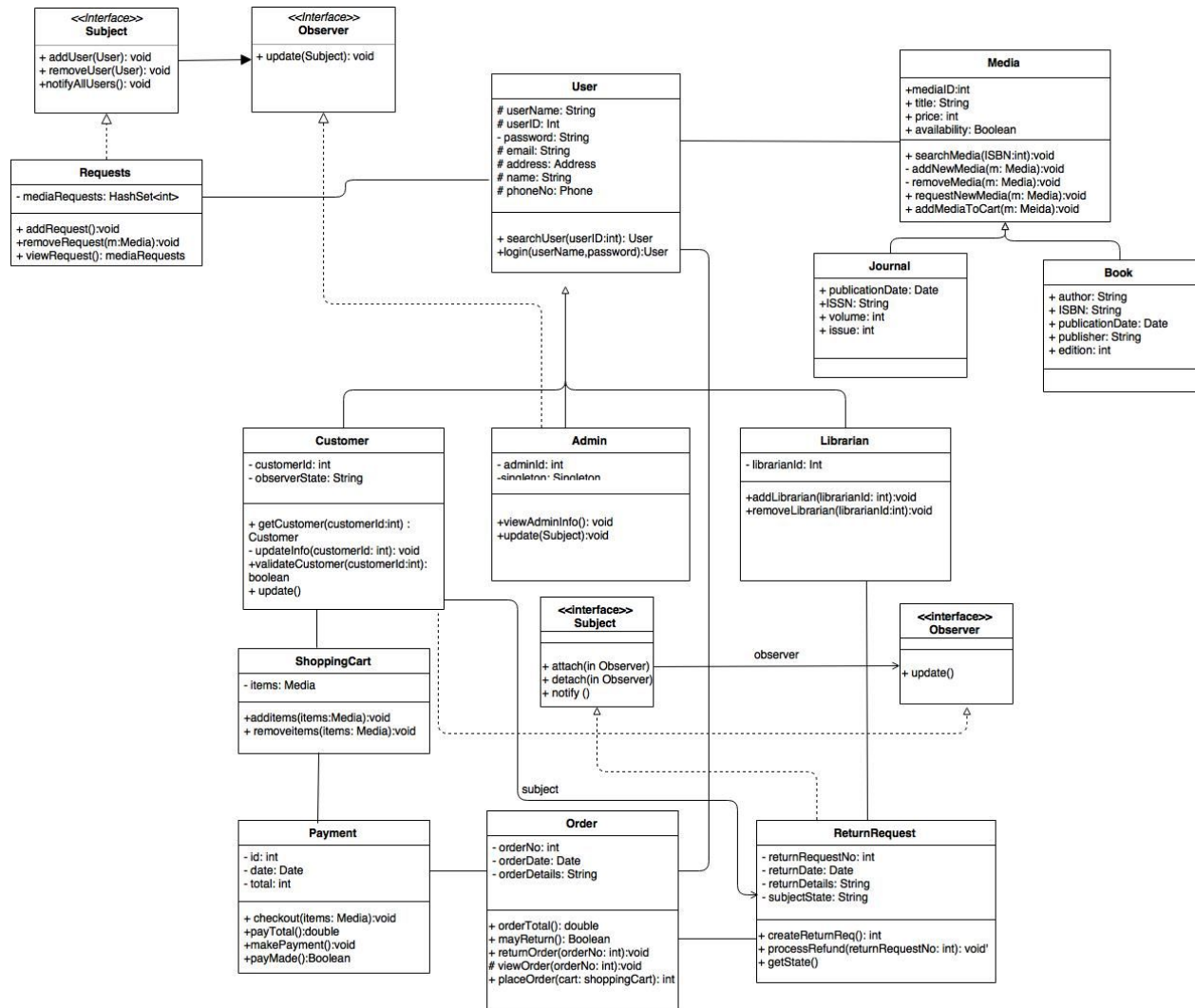
Karthik Handady

**Title:** Library Checkout System

**Project Part 2 Class Diagram:**



## New Class Diagram:



We applied the following design patterns:

1. Observer: ReturnRequest is the ConcreteSubject class which stores state of return requests and send a notification to observers (Customer) when it is changed. This was a necessary addition as there was no way for the customer to know if the return was successful before implementing the pattern. We also applied the observer design pattern to requests
2. Singleton: Changed Admin class to singleton as we wanted there to only be one admin instance.

We also made some changes by adding some variables to classes that we realized we needed when we began to implement the classes and database (ex. mediaID).