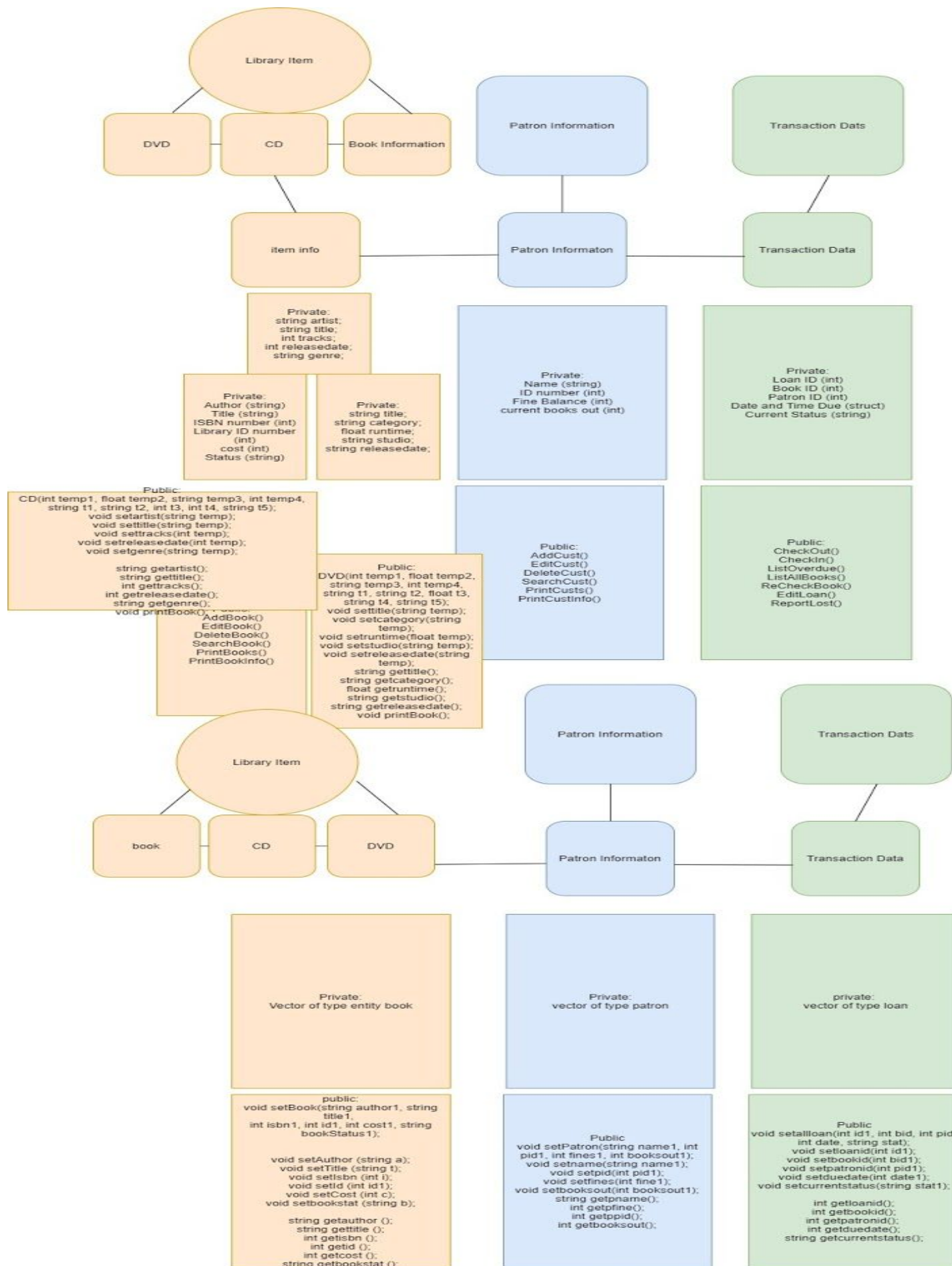Kaleb Perez
Homework 2
CSCE 1040
Pseudo
Code

CD(int temp1, float temp2, string temp3, int temp4, string t1, string t2, int t3, int t4, string t5);
void setartist(string temp);
void settitle(string temp);
void settracks(int temp);
void setreleasedate(int temp);
void setgenre(string temp);

```
string getartist();
string gettitle();
int gettracks();
int getreleasedate();
string getgenre();

void printBook();
```

Library Item

DVD — **CD** — **Book Information**

Patron Information

Transaction Dats

item info

Patron Informaton

Transaction Data

Private:
string artist;
string title;
int tracks;
int releasedate;
string genre;

Private:
Author (string)
Title (string)
ISBN number (int)
Library ID number (int)
cost (int)
Status (string)

Private:
string title;
string category;
float runtime;
string studio;
string releasedate;

Private:
Name (string)
ID number (int)
Fine Balance (int)
current books out (int)

Private:
Loan ID (int)
Book ID (int)
Patron ID (int)
Date and Time Due (struct)
Current Status (string)

Public:
CD(int temp1, float temp2, string temp3, int temp4,
string t1, string t2, int t3, int t4, string t5);
void setartist(string temp);
void settitle(string temp);
void settracks(int temp);
void setreleasedate(int temp);
void setgenre(string temp);

string getartist();
string gettitle();
int gettracks();
int getreleasedate();
string getgenre();
void printBook();

Public:
AddBook()
EditBook()
DeleteBook()
SearchBook()
PrintBooks()
PrintBookInfo()

Public:
DVD(int temp1, float temp2,
string temp3, int temp4,
string t1, string t2, float t3,
string t4, string t5);
void settitle(string temp);
void setcategory(string
temp);
void setruntime(float temp);
void setstudio(string temp);
void setreleasedate(string
temp);
string gettitle();
string getcategory();
float getruntime();
string getstudio();
string getreleasedate();
void printBook();

Public:
AddCust()
EditCust()
DeleteCust()
SearchCust()
PrintCusts()
PrintCustInfo()

Public:
CheckOut()
CheckIn()
ListOverdue()
ListAllBooks()
ReCheckBook()
EditLoan()
ReportLost()

Library Item

book — **CD** — **DVD**

Patron Information

Transaction Dats

Patron Informaton

Transaction Data

Private:
Vector of type entity book

public:
void setBook(string author1, string
title1,
int isbn1, int id1, int cost1, string
bookStatus1);

void setAuthor (string a);
void setTitle (string t);
void setIsbn (int i);
void setId (int id1);
void setCost (int c);
void setbookstat (string b);

string getauthor ();
string gettitle ();
int getisbn ();
int getid ();
int getcost ();
string getbookstat ();

Private:
vector of type patron

Public
void setPatron(string name1, int
pid1, int fines1, int booksout1);
void setname(string name1);
void setpid(int pid1);
void setfines(int fine1);
void setbooksout(int booksout1);
string getpname();
int getpfine();
int getppid();
int getbooksout();

private:
vector of type loan

Public
void setallloan(int id1, int bid, int pid,
int date, string stat);
void setloanid(int id1);
void setbookid(int bid1);
void setpatronid(int pid1);
void setduedate(int date1);
void setcurrentstatus(string stat1);

int getloanid();
int getbookid();
int getpatronid();
int getduedate();
string getcurrentstatus();

- AddBook()

Asks for type of item then asks for all variables held in item

- EditBook will prompt change the info from addbook item one at a time

- DeleteBook will delete all items of a book vector slot

- PrintBooks
  - o Will print the titles info of all items on vector

- PrintBookInfo
  - o Will Print all of the info from one book

- AddCust()
  - o Enter cust name
  - o Enter custID
  - o Enter cust fine balance
  - o Enter current books loaned

- EditCust will give the option to edit all of the information in customers profile • DeleteCust will delete customer from DataBase based on ID

- SearchCust
  - o Type in customer's name
  - o Will use a loop to search cust vector
  - o Bring up customers id based on name

- PrintCusts
  - o Will print out a list of all customers on database

- PrintCustInfo
  - o Will print out all of the information on a specific customer based on their ID

- CheckOut
  - o Will update customer wil a new book on profile
  - o Will update books profile as checked out
  - o Will check to make sure customer has less than 6 books checked
  - o Will add loan

- CheckIn
  - o Will check for overdue fines at .25c a day
  - o Will Update cust info as no longer checked out
  - o Will update book info as no longer checked out
  - o Will remove loan from customer

- ListOverdue
  - o Will search book vector for all overdue books
  - o Will print out all overdue books

- ListAllBooks (will need to change variable name)
  - o Will list all of the books currently checked out by particular customer

- Recheck book
  - o Will reset the date that the book must be turned in

- EditLoan
  - o Will edit the customer's loan status of the book. For example if they want to cancel
- ReportLost
  - o Will change books account to lost
  - o Will charge price of book to customer
  - o Will end loan of book to customer

Homework 4 Report

1. I spent a long time on this assignment, but not as long as on homework three. This assignment only took me about 12 hours instead.

2. I started late, about two weeks ago.

3. I found it difficult, but not as difficult as the last assignment. To me, the most difficult part was adding new functionality to old functions.

4. I was very good about time management this time around, I worked steadily on it every day.

5. I do not understand the question, but in future assignments I will try to do it with less help from TAs, I want to become independent.

6. I had the most trouble completing the loan functions that needed to be adjusted to work for the assignment. I also had trouble with my store and load functions.

7. I have no further comments, but I found inheritance and polymorphism to be very interesting. I think that it has been my favorite unit of this class so far.