Notes before we start

* Documents inventory entity will be a database
* The print class will be implemented as a singleton pattern
* Staff list is also a database

Brief class descriptions

User

The abstract super class of which the other users extend from

Class holds information on the user ID, user password, and user name

Functions: login, and logout

Login

A class User uses for logging in

Holds no information

Function validates

Manager

A subclass of User for managers

Holds no extra information past the User superclass

Functions include checking inventory

SystemAdmin

A subclass of User for the system admin

Holds no extra information past the User superclass

Functions include adding staff info, removing staff info, and updating staff info

Author

A subclass of User for authors

Holds a list of their created documents

Functions include submitting documents to be printed

Staff

A class which represents a staff member’s info

Holds information on the name, staff ID, and position

Class does not have any functions

Document

A class which represents a document’s info

Holds information on name, author, document ID, and publication date

Class does not have any functions

OrdinaryBuyer

A super class for buyers that have not upgraded to registered buyer

Holds information on name, buyer ID, registered status

Functions: searching for a document, placing an order, and making payments and register

RegisteredBuyer

A subclass OrdinaryBuyer for those that have upgraded their status

Holds no extra information past the OrdinaryBuyer superclass

Functions: accessing the promotion list

TransactionHistory

A class which holds information on a buyer’s past transactions

Holds receipts of a buyer

Functions: calculate total sum of payments, find total amount of purchases

Receipt

A class which holds information of a buy

Class holds information on