

# HW5 Report

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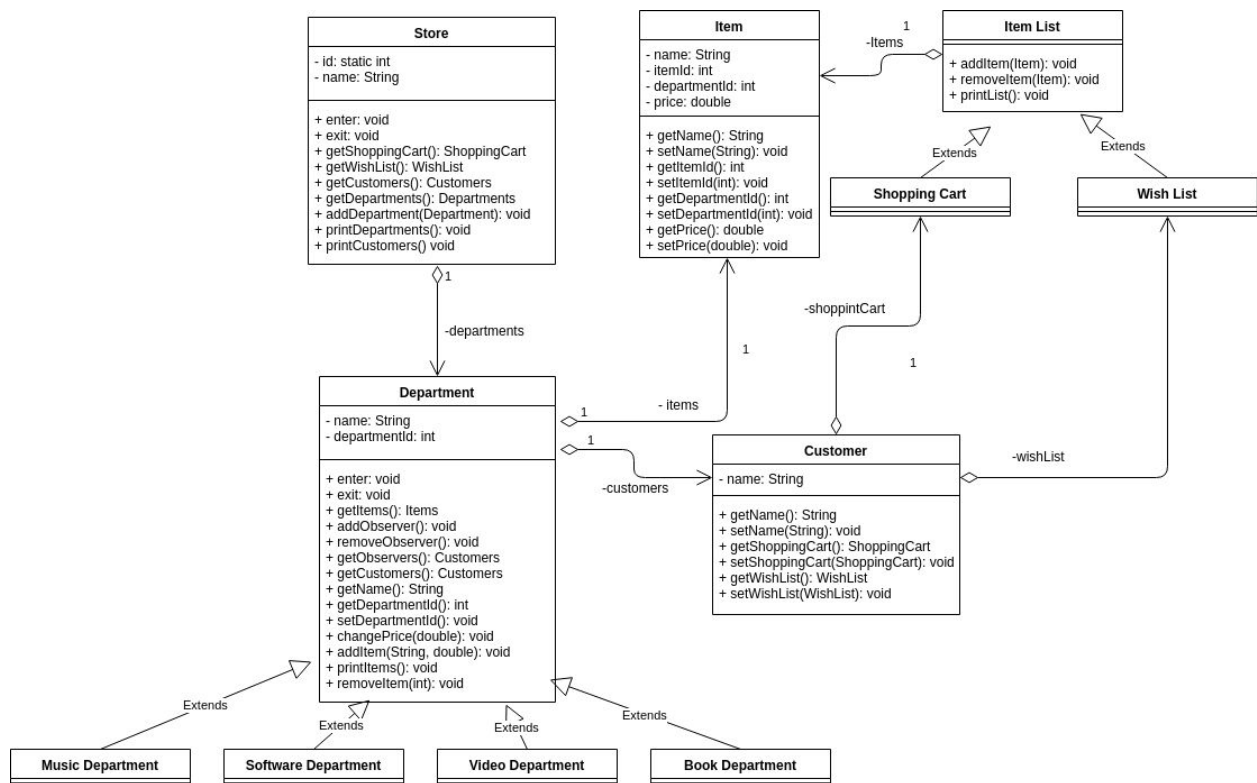
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## Note To User

To use the console application instead of displaying the output requested for this homework uncomment the portion of code in the main function following the code designed for this exercise.

If the program is erroring out before starting the store.ser file is most likely not properly initialized. Comment out the section were the program is loaded in and run the program once before uncommenting it to have the .ser file properly initialized.

## UML Diagram



## Possible Extension

One possible extension of this application could be to a full server implementation where the application would receive and process information from some other client or clients applications. Implementing the application this way would allow for proper notifications to be sent to each user for price changes in their wish lists or if they are on the watchlist in the department where a items price is changed. It would also allow for more users to access the program at once which would make this application much more appealing to use.

Another possible extension would be to allow for multiple stores. Different stores could see what other stores are selling and what price they are. This would make the software more appealing to stores that have more than one digital vender for example Amazon and eBay.

## Picture of Output

```
1. Watchlist
Price change on 'Peter Pan', notify:
Jack, Jill,

Price change on 'Peter Pan', notify:
Jack,

2. Shopping cart
1  Barbie
1  Peter Pan
1  Pizza

3. Department management
0  Music Department
1  Software Department
Department is already in the store...

0  Music Department
1  Software Department

Process finished with exit code 0
```

## Purchase Multiple Items From One Department

I would add another class called Item Collection that would have the ability to contain multiple other items for example a book series or cookware set. I would then alter the Item list class to allow it to hold collections in it as well as regular items so the customer's shopping cart could then contain single items as well as collections.