COE528 BookStore Report

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COE528: Object-Oriented Analysis Design

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Describe a use case following the format discussed in class

• Name: BookStore Use Case

• Participating Actors: Customers and Owner

• Entry Conditions: The actor logs in as either a customer or an owner

• The Flow of Events:

1. The owner logs in to the BookStore app. The owner goes to the select screen and goes to Books and makes changes by adding/deleting books. The owner goes back to the select screen. Then goes to the Customer option. Creates usernames and accounts for Customers. The owner then logs out.

Customers can now log in and purchase books by selecting the available books
that they see in the catalogue. The Customer then logs out after selecting Buy or
Redeem Points and Buy.

• Exit Conditions: When the program is closed, all relevant data is saved in proper text files. Customers.txt and Books.txt.

• Exceptions: Program will save relevant information up until crashing or closing.

• Special Reqts: Press X on the window to log out and save.

Describe the rationale behind using the State Design Pattern

The rationale behind using the State Design Pattern is that we use the same objects that use the same functions but are dependent on their internal variables. This helps with the maintablity and adjustability of the software. This allows us to make changes to sub-classes rather than reconstructing the whole thing.