SE 339 – Homework 3

**Changes to the Movie class**

The Movie class as it was following my last refactoring has become the Media class. It’s an abstract class that defines the basic functionality inherent in a form of media: title, daysrented, price, etc. It now contains variables for keeping track of whether a piece of media is intended for children or is new. These simplify the process of calculating the price of the media in question. It also has a variable and functions for keeping track of the sale price of the media item.

**Changes to the Rental class**

The Rental class has undergone some minor changes to facilitate sales as well as purchases. It now has two ArrayLists, one for items that are being purchased and one for items that are being rented. I didn’t have to change much else to make this compatible with the new class structure.

**New classes**

I implemented four new classes for this assignment. All of them extend Media. Their names are as follows: Movie, Music, Game, Book. Each of these classes contains its own implementation of getPrice(). Thus, each category can have different prices for kids, new, and regular items. This was much simpler than having 12 different classes, and the isNew() function allows the calculations for addFRP() to remain simple (about three lines). Simple is usually the way to go.