**Assignment 5: Movie Rental New features**

Starting from the code from assignment 4 there are many changes that have been made to make the application. The part for items other than movies have been removed as per discussion with the professor.

Application.java is the Driver Program to be run for testing the Rental features.

The Customer class uses the **Iterator** to traverse through the various Rental and Purchases in this transaction stored as a list of type Movie.

In Movie package class Movie is the main class that stores the name of the movie, the price codes and the count of the number of copies available. Movie class is the inherited by MovieRental and MoviePurchase. These two classes act as an interface to users requests and rest of the things happen in the back end.

These classes instantiate the Movie**Strategy** class which in turn uses a **Factory** to create objects of appropriate type of Movie and call the respective calculateRent, calculatePoints (for frequent renter points) or getPurchasePrice methods. The amount for the particular transaction is calculated and returned back to the customer class from where it is called in the first place.

While calculating the frequent renter points for a customer for the FIRST time, if the age of the customer is between **18-22** and he has one or more new release movies then **frequent renter points for all movies in that transaction are doubled as bonus**.

After each movie’s rent and renter points are calculated, if the **frequent renter points become 10** then the **movie comes for free**. The amount for that movie becomes 0.

The totalAmount is calculated and everything is printed in xml format.

This explains the overall workflow of the implementation being **submitted in assignment 5 as per my understanding**. Further details regarding specific methods can be found in the Javadoc (comments) written in the source code.