Describe the classes inside the package by drawing a class diagram

Rental

- _movie : Movie
- _daysRented : int

- + Rental()
- + getDaysRented()
- + getMovie()

Movie

- - CHILDREN=2 : int
- - REGULAR=0 : int
- - NEW_RELEASE=1 : int
- - _title : string
- - _priceCode : int

- + Movie()
- + getPriceCode()
- + setPriceCode()
- + getTitle()

Customer

- - _name : string
- - _rentals : Vector

- + Customers()
- + addRentals()
- + getName()
- + statement()

```
Rental[] rentals = {
```
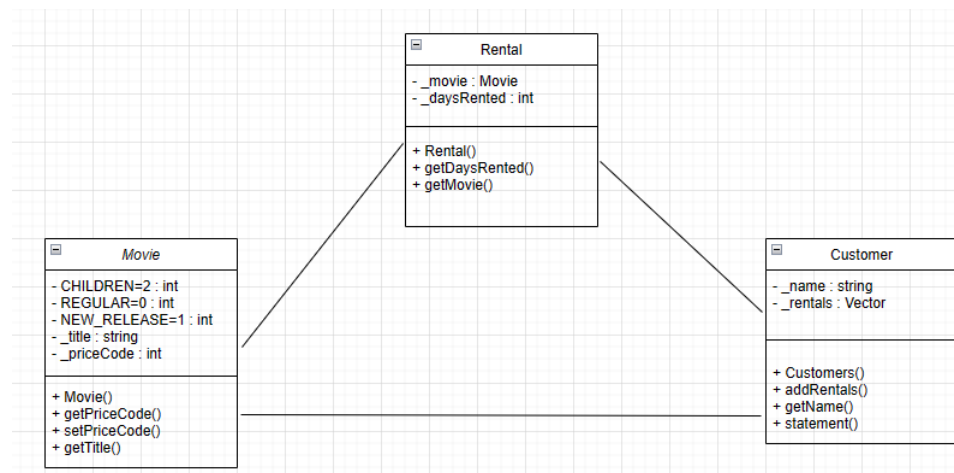
```
Microsoft Visual Studio Debug Console                    —    □    X

Rental Record for John
        Rogue One       15
        Frozen  7,5
        Star Wars III   5
Amount owned is 27,5
You earned 4 frequent renter points

C:\Users\ASUS\Downloads\refactoring_csharp\day01\day01\bin\Debu
g\net7.0\day01.exe (process 28476) exited with code 0.
To automatically close the console when debugging stops, enable
 Tools->Options->Debugging->Automatically close the console whe
} n debugging stops.
  Press any key to close this window . . ._
```

Give a list of improvements required to satisfy criteria for the lisibility, the maintenability, the re-usability and the extensibility of your code.

- Replace ArrayList with List<Rental> for type safety and better readability.
- Encapsulate fields using properties: PriceCode, Title, DaysRented, and Movie. - Use consistent naming conventions: Rename getDaysRented and getMovie to GetDaysRented and GetMovie.
- Use var for iterators for cleaner code.
- Use StringBuilder for string concatenation in a loop for better performance.
- Improve switch statement in Customer class by moving pricing logic into the Movie class for better encapsulation.
- Add comments for complex logic, especially within the switch statement, to improve code understanding.