

# movRentv1.use

--This is a USE model of the first design of a movie rental system

```
model MovieRental
```

```
enum PriceCode {regular, family, newRelease}
```

```
class Customer
```

```
attributes
```

```
    name:String
```

```
operations
```

```
    addRental()
```

```
    getName()
```

```
    Statement()
```

```
        begin
```

```
            declare m:Movie;
```

```
            for ren in self.rentals do
```

```
                ren.getDaysRented();
```

```
                m := ren.getMovie();
```

```
                m.getPriceCode();
```

```
                m.getTitle();
```

```
            end
```

```
        end
```

```
end
```

```
class Rental
```

```
attributes
```

```
    daysRented:Integer
```

```
operations
```

```
    getDaysRented()
```

```
        begin
```

```
        end
```

```
    getMovie(): Movie
```

```
        begin
```

```
            result := self.movie
```

```
        end
```

```
end
```

```
class Movie
```

```
attributes
```

```
    title:String
```

```
    priceCode:PriceCode
```

```
operations
```

```
    getPriceCode()
```

```
        begin
        end

    setPriceCode()

    getTitle()
        begin
        end
end

association custRentals between
    Customer[1] role renter
    Rental[0..*] role rentals
end

association movRental between
    Rental[0..*] role movRentals
    Movie[1] role movie
end
```

## mr\_cmds-v1.x

--This file creates 1 customer, 2movies, and 2rentals. It sets up  
--associations between them, and finally calls the Statement() method  
--for the customer.

```
!create c1:Customer
!create m1:Movie
!create r1:Rental
!set m1.priceCode := PriceCode::regular
!set m1.title := 'Movie1'
!set r1.daysRented := 5
!insert (c1,r1) into custRentals
!insert (r1,m1) into movRental

!create m2:Movie
!create r2:Rental
!set m2.priceCode := PriceCode::newRelease
!set m2.title := 'Movie2'
!set r2.daysRented := 3
!insert (c1,r2) into custRentals
!insert (r2,m2) into movRental

!c1.Statement()
```