Modelagem orientada a **Eventos**

Exemplo: modelo *Posto de Gasolina*

```
Entity Car
Resource clerks = 3                                  //clerks avaliable to serve
Set carsQueue: Car
```

```
Event carArrival()
      car = create Car
      if clerks.avaliable                            //clerks quantity > 0
            schedule startService(car) now
      else
            carQueue.enqueue(car)
      if modelClock < 100 seconds                    //dont generate cars after 100 secs...
            schedule carArrival() in 5 seconds       //ex.:  in  exponential (3) seconds
```

```
Event startService(Car car)
      clerk.allocate();                              //clerks quantity --
      schedule finishService(car) in 12 seconds      //ex.:  in  normal(10,2) seconds
Event finishService(Car car)
      delete car
      clerks.free()                                  //clerks quantity ++
      if not carsQueue.Empty
            schedule startService(carQueue.dequeue) now
```

```
mainLooP
      schedule carArrival() now
      startSimulation
      //shows collected statistics
      print carQueue.averageSize
```

Modelagem orientada a **Processos**

Exemplo: modelo *Posto de Gasolina*

```
Entity Car
Set carsQueue: Car
```

```
Process carGenerator
      while(modelClock < 100)
            car = create Car
            carQueue.enqueue(car)
            sleep(5) seconds
```

```
Process service
      while(true)
            if not carsQueue.Empty
                  Car car = carQueue.dequeue
                  sleep(12) seconds
                  delete car
```

```
mainLooP
      start carGenerator now
      start service now
      start service now
      start service now
      startSimulation
      //shows collected statistics
      print carQueue.averageSize
```