- Company will Lay off All Type of Employees in Two Cases
- If Employee Vacation Stock < 0
- If Employee Age > 60

```
class Employee
   {
       public event
               EventHandler<EmployeeLayOffEventArgs> EmployeeLayOff;

      protected virtual void OnEmployeeLayOff
                                          (EmployeeLayOffEventArgs e)
       {
           throw new NotImplementedException();
       }

       public int EmployeeID { get; set; }

       public DateTime BirthDate
       {
           get { throw new NotImplementedException(); }
           set { throw new NotImplementedException(); }
       }

       public int VacationStock
       {
           get { throw new NotImplementedException(); }
           set { throw new NotImplementedException(); }
       }

       public bool RequestVacation (DateTime From , DateTime To)
       {
           throw new NotImplementedException();
       }

       public void EndOfYearOperation ()
       {
           throw new NotImplementedException();
       }
   }
   enum LayOffCause
   {        ///Implement it YourSelf     }
   public class EmployeeLayOffEventArgs
   {
       public LayOffCause Cause { get; set; }
   }
```

Department

- Employee should be removed from Department Staff List in both Cases
- If Employee Vacation Stock < 0
- If Employee Age > 60

```
class Department
    {
         public int DeptID { get; set; }
        public string DeptName { get; set; }

        List<Employee> Staff;

        public void AddStaff (Employee E)
        {
            throw new NotImplementedException();
            ///Try Register for EmployeeLayOff Event Here
        }

        ///CallBackMethod
        public void RemoveStaff (object sender ,
                                            EmployeeLayOffEventArgs e)
        {
            throw new NotImplementedException();
        }
    }
```

Club

- Employee should be removed from Club Member List Only if Employee Vacation Stock < 0.
- If Employee Age > 60 will still remain a Member of Company Club

```
class Club
    {
        public int ClubID { get; set; }
        public String ClubName { get; set; }

        List<Employee> Members;
        public void AddMember(Employee E)
        {
            throw new NotImplementedException();
            ///Try Register for EmployeeLayOff Event Here
        }

        ///CallBackMethod
        public void RemoveMember
                            (object sender, EmployeeLayOffEventArgs e)
        {
            throw new NotImplementedException();
           ///Employee Will not be removed from the Club if Age>60
           ///Employee will be removed from Club if Vacation Stock < 0
        }
         }
```

Sales Employee & Board Member

- Sales Employee Doesn’t have Vacation Stock
- Sales Employee Will not be Fired if his/her Vacation Stock <0
- Sales Employee have a target to Achieve
- Sales Employee will be Fired if Failed to Achieve Sales Target
- Board Member has no retiring Age (will not be Fired if AGE > 60)
- Board Member is not a Full time Employee (Has no vacation Stock)
- Board Member will be layoff from the Company in case He/She Resigned.
- Board Member will forever be a Member of Company Clubs

```
class SalesPerson:Employee
    {
        public int AchievedTarget { get; set; }

        public bool CheckTarget (int Quota)
        {
            throw new NotImplementedException();
        }
    }
class BoardMember:Employee

    {
        public void Resign ()
        {
            throw new NotImplementedException();
        }
    }
```