22 – Visitor

# Setting

* Different kinds of traversals of company object structure consisting of Employees and Projects.

# Steps

## 01

* Walk through the existing solution. Show the data and what is computed by the algorithm.

## 01 🡪 02 Add Element and Visitor structure. Refactor Computation

* Create IElement
  + Accept( IVisitor ) -> Accept on all employees and all projects
* Create IVisitor
  + Visit (Employee )
  + Visit (Project )
* Make Company : IElement
  + Accept -> Employees.Visit and Projects.Visit
* Make Employee : IElement
  + Accept -> visitor.Visit
* Make Project : IElement
  + Accept -> visitor.Visit
* Create RemainingExpensesVisitor : IVisitor
  + Visit( Employee ) -> 1880 \* stock options
  + Visit (Project ) -> 1095 \* remaining hours for InProgress projects
* Modify Program.cs accordingly

## 02🡪 03 Adding a PromotionVisitor

* Create class PromotionVisitor
  + Visit( Employee )
    - Add 1 to level
  + Visit( Project )
    - Do nothing
* Modify Program.cs accordingly