

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY, BEFORE
YOU PROCEED WITH YOUR TEST (we really mean it !!! 😊)

Guidelines:

- *Always make use of the OOP (abstraction, polymorphism, encapsulation, and Inheritance) principles when designing your Solution*
- *Keep in mind the separation of concerns principle so your code is more organized*
- *The design and use of best practices will be evaluated.*
- *You will need to send us the link of a public available repository (github, bitbucket, etc.), once you finish.*
- *Avoid Using external tools/software that can cause us trouble when reviewing your solution.*

Create a simple web application following the next steps:

1. Create a data access layer that consumes the following [API](#) as your data repository.
2. Create a Business Logic layer so you can retrieve the employees' information including a **calculated Annual Salary** following these rules:
 - Create your DTO (Data Transfer Object) Classes depending on the type of Contract that a given employee has (Hourly or Monthly).
 - Make use of a Factory pattern to create the concrete classes so you can calculate the salary depending on the type of contract.
 - Employees can have to 2 types of Contracts: *Hourly Salary Contract* and *Monthly Salary Contract*.
 - For Hourly Salary Employees the Annual Salary is:
 $120 * HourlySalary * 12$
 - For Monthly Salary Employees the Annual Salary is:
 $MonthtlySalary * 12$
3. Create a **"WEB SERVICE"/API** that can return information for a given employee or multiple employees.

4. Create a web page (view) using the following guidelines:

You can use the front-end technologies you are familiar with (JSP, JavaScript, HTML, etc.)

- The view must contain a textbox, so the user can type the id of a particular employee.
- The view must contain a **Get Employees** button
- If the textbox is empty, when the **Get Employees** button is clicked, retrieve the information for all the employees including the calculated Annual Salaries by calling your API
- If the textbox has the id of a given employee, retrieve only the information for that particular employee including the calculated Annual Salary by calling your API
- Information must be displayed in a table.

5. (OPTIONAL) BONUS POINT: Create one Unit test to test one of the methods of your Business Logic Layer.

6. (OPTIONAL) BONUS POINT: Use Spring Framework in any part of your implementation and justify its use.

Feel free to be creative and amaze us!