

## **Senior .NET Developer Hands On Test**

## 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.
- The application you upload should be able to run in a standard Visual Studio 2017 installation that we will use to review it. 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 simple Factory Method 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:

For Monthly Salary Employees the Annual Salary is:

MonthtlySalary \* 12



- 3. Create a WEB API Controller that can return information for a given employee or multiple employees.
- 4. In your MVC Application Create a View and a Controller following these guidelines: You can use the front end technologies you are familiar with (JavaScript, JQuery, Angular 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 APIs
- 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 APIs
- Information must be displayed in a table and can be manually styled or using Bootstrap.
- 5. **OPTIONAL BONUS POINT:** Create one Unit test to test one of the methods of your Business Logic Layer.

Feel free to be creative and amaze us!