# C2- S2 - PRACTICE

# EXERCISE 1 – COUNTRIES

A country is described by

* Its name
* Its population (in millions)
* The capilat name
* The currency (dollar, riel..)

**Q1** Create a class **County** with all the required attributes

**Q2** Create 3 countries, following this table:

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Population | Capital | currency |
| France | 70 | Paris | Euro |
| Cambodia | 17 | Phnom Penh | Riel |
| UK | 80 | London | Pound |

**Q3** Inside the class Country, create a method which return information about the country:

* getInformation() : string

For example, for France country this method shall return:

Welcome to **France**, **70** millions people, cpital **Paris** and currency **Euro**!

**Answer**

class Country{

    name: string

    population: number

    capital: string

    currency: string

    constructor(name: string, pop: number, capital: string, currency: string) {

        this.name = name

        this.population = pop

        this.capital = capital

        this.currency=currency

    }

    getInformation():string {

        return(`Welcome to ${this.name} ${this.population} million people, capital ${this.capital} and currency ${this.currency}!`)

    }

}

let france = new Country("France", 70, "Paris", "Euro")

let cambodia = new Country("Cambodia", 17, "Phnom Penh", "Riel")

let uk = new Country("United Kingodm", 80, "London", "Pound")

console.log(france.getInformation())

console.log(cambodia.getInformation())

console.log(uk.getInformation())

# EXERCISE 2 – ALUMNI SALARY

We want to compute the salaries of fresh WEP alumni.

*Note : this is not real word, just for fun for this practice !*

WEP alumni can have different salaries, depending on their :

* Experience in **VueJS** number of years)
* Experience in **NodeJS** (numberof years)
* If they can code or not using **OOP**

|  |  |  |  |
| --- | --- | --- | --- |
| Eperience  in VueJS | Eperience  in Node JS | Can code  OOP | SALARY |
| Less than a year | Less than a year | no | 250 |
| more than a year | Less than a year | no | 350 |
| more than a year | more than a year | no | 450 |
| more than a year | more than a year | yes | 700 |

**Q1** Create a class **WepAlumni** with all the required attributes to compute salary

**Q2 Inside this class**, create a method to compute the salary of the alumni: this function should return the **appropriate salary**, based on the criteria specified above.

getSalary() : number

**Q3** Test you code by **creating different alumni** and **check their returned salary**

|  |  |
| --- | --- |
| Alumni profile | Salary |
| 0.5 year experience in VueJS  0.5 year experience in VueJS  Can code in OOP | 250 |
| 1 year experience in VueJS  0.5 year experience in VueJS  Can code in OOP | 350 |
| 2 year experience in VueJS  2 year experience in VueJS  Cannot code in OOP | 450 |
| 2 year experience in VueJS  2 year experience in VueJS  Can code in OOP | 700 |

Answer

class WepAlumni{

    experienceVue: number

    experienceNode: number

    canCodeOOP: boolean

    constructor(vue: number, node: number, oop:boolean) {

        this.experienceVue = vue

        this.experienceNode = node

        this.canCodeOOP=oop

    }

    getSalary():number {

        let vue: number = this.experienceVue

        let node: number = this.experienceNode

        let oop: boolean = this.canCodeOOP

        let total:number

        if (vue < 1 && < 1 && oop ==false) {

            total=250

        } else if (vue >=1 && node < 1 && oop ==false) {

            total=350

        } else if (vue >= 1 && node >=1 && oop ==false) {

            total=450

        } else if (vue >= 1 && node >= 1 && oop ==true) {

            total=700

        }

        return total

    }

}

let empObj1 = new WepAlumni(0.5, 0.5, false)

console.log(empObj1.getSalary())

let empObj2 = new WepAlumni(1, 0.5, false)

console.log(empObj2.getSalary())

let empObj3 = new WepAlumni(2, 2, false)

console.log(empObj3.getSalary())

let empObj4 = new WepAlumni(2, 2, true)

console.log(empObj4.getSalary())