DO IT – Front End developer

Section 4 - Assignment 2 – Typescript class/abstract class

SMART d.o.o, New Frontier Group

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# Specification of assignment

During this assignment you are going to learn about TypeScript class, abstract class, constructor, super keyword through the assignment tasks.

# Requirements for this project

Before you can start with this project you will need to know how to work in Windows 7 OS. You will need average expirience in Windows 7 OS . You need to know how to use Visual Studio Code. You will use GIT commands for this assignment.

You will work this assignment in parallel as you listening courses in section 4 about TypeScript .

**Task 1**

1. Create class with name Animal. Create parametar name . Create constructor with one parametar name type string for initialiyation parametar name
2. Create two functions in class Animal. First function with name move which will have one parameter distanceInMeters type number, and initialze value to 0. Function will not return any value only display value of parameter name and distanceIn Meters in console. Second function with name behave and parameter trait type string. Function will not return any value only display value name and trait in console.
3. Create class Snake which will extend class Animal and create constructor with parametar name . Through this construtor set parent parametar name . Create also two functions same as in clas Animal ,and in function move initalize distance inMeters parameter to 5. Display next line in console



Call parent function move in this child function and send parameter distanceInMeters.

In second function behave initialize parameter trait to „hiss“ , and display nex line in console



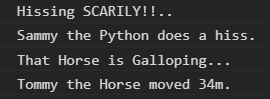
Call parent function behave and send parametar trait.

1. Create third class Horse which will extend class Animal and create constructor with parametar name . Through this construtor set parent parametar name . Create function move same as in class Animal ,and in function move initalize distance inMeters parameter to 45. Display next line in console from function move



Call parent function move in this child function and send parameter distanceInMeters.

1. Make all necessary objects and make console log to look like this



**Task 2**

1. Create abstract class Department with constructor with parameter name type string. Constructor need to show log message „Department is : „ and then name of department. Make function printName which have no return value and need to show in log also „Department is : „ and then name of department. Then make abstrac function printMeeting with parameter subDept type string and with no return value
2. Create class Accounting Department which extends Department class. Create constructor with no parameters and which call parent constructor with value

"Accounting Department"

Implement parent function printMeeting with log in console

`You have a meeting with the ${subDept} department at 08:00 IST`

1. Create BioTechnologyDepartment class which extends Department class. Implement constructor from parent class with value

"BioTechnology and Genetics Department"

Create implementation of parent class printMeeting with value

`You have a meeting with the ${subDept} department at 14:00 IST`

1. Initialize new object for class AccountingDepartment and BiotechnologyDepartment and call printMeeting class from both class with values „Finance“ for first object function and „Cellbiology“ for second object function.
2. Create index.html and make one button Show appoitments . On click show results of two called function in div . Make necessary adjustments in code to show values.
3. In tsconfig.json import put this line

"lib": ["dom","es6"]

# Timeline

You will have 3 hours to finish this job.

# Tools

## IDE and Source Control

You will use Windows 7 OS for this assignment. If you wish you can use Visual Studio Code. You need to use GIT Bash in this assignment.