



Lesson 09

Software Installation

Install node.js (version 12.13.0 LTS)

Install Typescript Module: in cmd console type: `npm install -g typescript`

Install WebStorm from JetBrains.

Introduction to TypeScript

In WebStorm, create a project from type Node.js.

Write a program in TypeScript for the modelization of the following animal taxonomy.

Animal Taxonomy

```
Animal  -->  Reptile
-----
Animal  -->  Mammal  -->  Bovine
-----
Animal  -->  Mammal  -->  Canine
-----
Animal  -->  Mammal  -->  Feline  -->  Cat
-----
nAnimals      nMammals      nFelines      nCats
habitat
              show()        show()        show()
              talk()         talk()
              sound          sound
                           name
```

- Animal, Reptile, Mammal, Bovine, etc. are classes or interfaces. Decide how to implement each one.
- For each one, you have properties and methods to implement. Some of them don't have an implementation.
- Properties beginning by "n" have the number of instances of that class.
- The method `show()`, write the quantity of existent animals and other information if present, like habitat, family and name.



- The method `talk()`, write the sound made by the animal.
- Each class and interface must be placed in one single module.
- Create a typescript (ts) file, named “app.ts” to test

In a cmd console, run the commands to compile e run the application:

- `tsc app.ts`
- `node app.js`