



Lesson 09

Software Installation

Install Node.js, Typescript and Angular, as mentioned in Software document

Introduction to TypeScript

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

Write a program in TypeScript to model the following animal taxonomy:

```
# Animal Taxonomy
-----
Animal      Reptile
nAnimals
habitat
show()
-----
Animal      Mammal      Canine      Dog
            nMammals    nCanines    nDogs
            show()      race        bark
            talk()      talk()
-----
Animal      Mammal      Feline      Cat
            nMammals    nFelines    nCats
            family     meow
            name
            talk()
-----
```

- Implement Animal, Reptile, Mammal, Canine, Dog, Feline and Cat as classes.
- For each one, you have properties and methods to implement. Some of them don't have a complete implementation – they are abstract classes.
- 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, like barking, meowing, etc..
- Each class 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 and run the application:

- tsc app.ts
- node app.js