**TypeScript OOP**

**OOPS: - Object Oriented Programming Structure**

Object, class, encapsulation, abstraction, inheritance, polymorphism, …

**Object**: - it represents physical item, that represent a person or thing

Object is a collection of attributes (details) and methods (manipulations)

Ex: - student is an object.

**Property/Attribute**: - these are the details of the object.

Used to store values, these are existing inside the object.

**Method**: - these are the operations / tasks of the object, which manipulates / calculates the data and do some process.

It is a function inside the object, in other words, a function which is stored inside the object is called as “Method”

**Syntax to create object**

var ObjectName = {

propertyname:value,

----

Methodname : function()

{

Body of the method

}

}

Once object is created, properties and methods can be access as follows

Objectname.property / methodname()

**CLASS**

It is representing model of the object, which defines list of properties and methods of the object.

class <classname>

{

property:datatype = value;

…..

methodname (parameter:datatype, …..) : returntype

{

Body of the method

}

}

We can create any no of objects for a class once it is created.

Syntax: **var objectname = new classname ([para meters]);**

Accessing of properties and methods has to be done with the help of object as follows

Objectname.property / methodname ()

**Access Modifiers: -**

These are the keywords which specifies how to access class members inside and outside of the class.

**private: - it** allows to access class members (properties and methods) only inside the class.

**public: -** it allows to access class members inside and outside of the class. By default, class members are public.

**protected: -** it allows to access one class members into another specific class only.

**access modifier property:<data type>;**