1.11 Class Implementing Interface

This section will guide you to:

* Create and run TypeScript code in your terminal
* Define classes that implement interfaces in TypeScript

This lab has two subsections, namely:

1.11.1 Writing a TypeScript program that defines classes implementing interface

1.11.2 Executing the program and verifying how interfaces work

**Step 1.11.1:** Writing a TypeScript program that defines classes implementing interface

Open your code editor and create a new file to type the code in

* *[Right click]* on the **File menu** of the code editor -> Select *New File*
* Enter the below code resolving the warning and errors due to compatibility-related issues
* *[Right click]* on the **File menu** of the code editor -> Select *Save as* -> Enter the filename (with**.ts** file extension) -> Click *Save*

interface CommonFeatures {

name: string;

create(); // save an object

getAll(); // gets all the objects

}

class Product implements CommonFeatures {

name: string;

price: number;

constructor(name: string, price: number) {

this.name = name;

this.price = price;

}

create() {

console.log('Product created');

}

getAll() {

console.log('Returning all products');

}

}

class Student implements CommonFeatures {

name: string;

std: string;

constructor(name: string, std: string) {

this.name = name;

this.std = std;

}

create() {

console.log('Student created');

}

getAll() {

console.log('Returning all students');

}

}

let p: Product = new Product('iPhone X', 70000);

p.create();

p.getAll();

let s: Student = new Student('Harry', '10th');

s.create();

s.getAll();

**Step 1.11.2:**  Executing the program and verifying how interfaces work

If TypeScript is not already installed, you’ll need to install it by running the command, ***npm install –g typescript*** from the terminal. Before you execute the program, check for syntactical corrections. If no errors are found, follow the steps mentioned below:

* Open the terminal
* Navigate to the directory where the code is stored
* Type the command *tsc [fileName.ts]* and press Enter
* The code will compile
* Type the command node [fileName.js] and press Enter
* The code will produce the following output

