**TypeScript Language**

**Setup Environment for TypeScript**

* Install Node JS in your PC for package manager “NPM”.

<https://nodejs.org/en/download/>

* Test Node JS and NPM from command prompt  
  > node -v

> npm -v

- **Install TypeScript on your PC**

> npm install -g typescript

* **Test TypeScript Version**

> tsc -v

**Install Editor for IDE [**Integrated Development Environment]:

* **Install Visual Studio Code**<https://code.visualstudio.com/>
* Open Visual Studio Code from programs
* Go to Customize tab and “**Install support for JavaScript**”.
* Go to Extensions and Install the following Extensions

|  |  |
| --- | --- |
| **Extension Name** | **Purpose** |
| Live Server | It creates a local server for your projects. You can build application and test on live server.  [No need to install IIS, Tomcat etc..] |
| Vscode-icons | It provides developer friendly icons for various type of generic folders and files. |
| TsLint | It is language analyser for TypeScript. Developers have to following coding standards to avoid in-consistency. |
| EsLint | It is language analyser for JavaScript. |

**Create a new Project for TypeScript Programming:**

* Create a new folder for your project on your PC.   
  **C:\TypeScript4.0**
* Open the folder from VS Code

File Menu -> Open Folder -> Choose “C:\TypeScript4.0”

* Create a new HTML Page “index.html”

Right Click in Index.html page and select “Open with Live Server”.

* Open any browser and request the following URL  
  <http://127.0.0.1:5500>
* Add a new file “hello.ts”   
  alert(“Hello ! TypeScript”);
* Open Integrated Terminal in “Visual Studio Code” [Ctrl + ` ]
* Trans compile typescript program into JavaScript.   
  > tsc hello.ts
* This will add a new file “hello.js”
* Link hello.js to your index.html

**<!DOCTYPE html>**

**<html>**

**<head>**

**<title>Index</title>**

**<script src="hello.js"></script>**

**</head>**

**<body>**

**<h2>Welcome to TypeScript</h2>**

**</body>**

**</html>**

* Run on live server