TypeScript

Pre-requisites:

Node.js
npm (Node Package Manager

Installation & Running:

Check Node.js Version:
  Open your terminal or command prompt.
  To check if Node.js is installed, run the following command:

`node -v`

Install TypeScript Globally:

  If you have Node.js and npm installed, you can install TypeScript globally using

  npm. Open your terminal and run the following command:

`npm install -g typescript`

This installs TypeScript globally on your system.

Creating a New TypeScript Project:

  Create a new directory for your TypeScript project. You can do this using your

  operating system's file manager or the command-line.

Initialize a TypeScript Project:

  Open a terminal and navigate to your project directory.

  Run the following command to initialize a new TypeScript project:

`tsc --init`

This command generates a `tsconfig.json` file which contains configuration settings

for TypeScript.

Coding:

Create your TypeScript source files (`.ts`) in your project directory or a subdirectory.

You can write TypeScript code using any text editor or integrated development environment (IDE) of your choice.

Compile TypeScript to JavaScript:

TypeScript code needs to be compiled to JavaScript before it can be executed in a web browser or Node.js. Run the following command to compile your TypeScript code:

```
tsc
```

This command compiles all TypeScript files in your project directory according to the settings in `tsconfig.json`.

Run Your JavaScript Code:

After compiling, you can run your JavaScript code using Node.js or include it in your HTML files for web applications.