How to configure TypeScript Managed Applications:

1. **Typescript Compiler**
   1. Run command: “tsc filename.ts”
   2. **Watch Mode**: Tells typescript to watch a file. Whenever typescript notices a change in the file, it will automatically recompile the program:
      1. Run command: “tsc app -w” {ENTER]
   3. **How to allow TypeScript to manage the project**: Initialize the project once as a typescript project. All files and subfolders in the project will be managed by typescript.
      1. **Run command**: “tsc --init”, // creates tsconfig.json file.
         1. **tsconfig**.**json** - tells typescript how it should compile typescript files.
      2. **Run command** “tsc” to compile all TypeScript files; **Run command** “tsc -w” to compile and watch for any .ts file changes in the project.
      3. **After compilation manually add .js file to index.html**
         1. <script src=”app.js” defer></script>
   4. **How to configure compilation options:**
      1. See TypeScript Compiler Options excel file
2. **TypeScript Compiler Options:**
   1. [Link](https://www.typescriptlang.org/docs/handbook/compiler-options.html)
3. **Required Visual Studio Code Debugging Extensions:**
   1. Prettier
   2. JavaScript Debugger Nightly- Allows you to debug your TypeScript files, via Google Chrome, without using the Chrome Debug tools.
      1. Debugger for Chrome (Deprecated)
   3. Microsoft Edge Tools for Vs Code.
      1. Edge Browser
   4. Live Server – Allows you to start a local server for your application.
4. **Client-Side Debugging in TypeScript (React App) with** [**VS Code and Microsoft Edge**](https://code.visualstudio.com/docs/typescript/typescript-debugging#_clientside-debugging)
   1. Setup Debugger Launch Configurations:
      1. Start the server (npm start)
      2. Click “Run” -> “Add Configuration”
      3. Click Web App (for Edge)
      4. Point launch.json to the location of your local file:
         1. "url": "http://localhost:3000/prototypes/mondly-placement-test-v2",
         2. Set a breakpoint in your Container or Component file.
   2. Run Debugger:
      1. Click “Run and Debug”"
      2. Click the green play button to the left of “Run and Debug”
      3. A new instance of MS Edge should open, with your application.
      4. Click a button in your app to start the Debugging your code.
5. **Client-Side Debugging in Vanilla TypeScript with Live Server** 
   1. Setup Debugger Launch Configurations:
      1. Search for your index file:
         1. **Example**: http://127.0.0.1:5500/section3/solved/video45/config-04-chrome-debugging/
      2. Click “Run” -> “Add Configuration”
      3. Click Web App (for Edge)
      4. Point launch.json to the localhost url, using port 5500:
         1. "url": "http://localhost:5500/section3/solved/video45/config-04-chrome-debugging",
         2. Set a breakpoint in your app.ts file.
         3. Compile your code with “tsc -w” command, to generate source maps in the “./dist” folder.
      5. Start Live Server
         1. Click “Go Live” button, in VS Code lower right window
   2. Run Debugger:
      1. Click “Run and Debug”
      2. Click the green play button to the left of “Run and Debug”
      3. A new instance of MS Edge should open, with your application.
      4. Click a button in your app to start Debugging your code.