Angular with Native Script

**Requirement**

Create angular application using Angular CLI and make it available on mobile as application through native script.

**Solution**

You need to follow below steps to fulfill your requirement:-

Setting Angular Environment:-

<https://angular.io/guide/setup-local>

1. Install recommended version of node.js from [nodejs.org.](https://angular.io/guide/setup-local)
2. Install the Angular CLI globally by typing npm install -g @angular/cli in console window.

Setting Native Script Environment:-

<https://scotch.io/tutorials/use-angular-and-nativescript-to-build-a-web-and-mobile-application>

1. Install the NativeScript CLI and NativeScript schematics for the Angular CLI

by typing mention below in console window.

npm install -g @nativescript/schematics

npm install -g nativescript

Creating new Angular CLI project with NativeScript support:-

1. From command line execute the following: -

> ng new myProject .

b) We can add mobile application support by following command:-

>ng add @nativescript/schematics.

Changes within Angular project:-

After installing NativeScript in our project it will add below files:-

1. app.module.tns.ts :- here you need to import NativeScriptFormsModule to work with html files for mobile.
2. app-routing.module.tns.ts:-here you need to provide routing related to mobile application.
3. Every component will have its own html and css file related for mobile application as mention below:-

<componentname>.component.tns.html

<componentname>.component.tns.css

Creating a service for modifying and fetching data(it will be shared by both mobile and web application) :-

>ng g service student

Import this service in your component to use the get and post method defined in it.

<https://docs.nativescript.org/core-concepts/data-binding#binding-in-xml>

After designing and coding for you application you can view the result using following command:-

Angular Application:-

>ng serve

Mobile Application:-

>tns run android --bundle –emulator

It will start installing all the files automatically to generate and buld and deploy in your connected devices or emulator.

Run “>tns doctor” to see all the dependencies are created.

<https://docs.nativescript.org/start/ns-setup-win#system-requirements.>

If any how it does not (in my case) you will have to install it one by one:-

1. @powershell -NoProfile -ExecutionPolicy unrestricted -Command "iex ((new-object net.webclient).DownloadString('<https://chocolatey.org/install.ps1>'))" && SET PATH=%PATH%;%ALLUSERSPROFILE%\chocolatey\bin
2. choco install googlechrome -y
3. choco install nodejs-lts -y
4. choco install jdk8 -y
5. choco install android-sdk -y
6. "%ANDROID\_HOME%\tools\bin\sdkmanager" "platform-tools" "platforms;android-25" "build-tools;25.0.2" "extras;android;m2repository" "extras;google;m2repository"
7. @powershell -NoProfile -ExecutionPolicy Bypass -Command "iex ((new-object net.webclient).DownloadString('<https://nativescript.org/setup/win-avd>'))"
8. choco install androidstudio -y
9. npm i -g nativescript

Run “>tns device android --available-devices”to see available connected device or emulator.

If no device or emulator available connect a device or create a emulator.

To create a emulator go to android studio>AVD amanger and create a emulator of your choice.

By default your bios do not allow to create virtual directory for that case go to bios setting and enable virtual Techonology –x.

After all these steps again run

>tns run android --bundle –emulator.

You will be able to see you app installed in your connected devices or emulator.

Angular Deployment to IIS:-

<http://sundeepkamath.in/posts/hosting-angular-application-in-iis-server/>

Angular build:-

> ng build --prod --base-href /my-app/

After executing this command there will be a dist folder in application.Follo these steps to host the application in IIS.

1. Create a folder in c folder.
2. Copy entire content of dist into this folder.
3. Create a website in IIS and map the newly created folder to physical path.provide a valid port.
4. Browse the application using <http://localhost:port_number/my-app/>