Environemental setup

- install node
- install angular cli
    - node -v
    - npm install -g @angular/cli
    - ng --version
- update angular cli
    - npm uninstall -g angular-cli
    - npm cache clean/npm cache verify (if npm > 5)
    - npm install -g @angular/cli@latest
- downgrade angular cli
    - rm -rf node_modules
    - npm uninstall --save-dev angular-cli
    - npm install --save-dev @angular/cli@1.2.2
    - npm install

Building Blocks Of Angular Application

- Components
- Directives
- Services
- Routes
- Modules
- Pipes
- Guards

Understanding Angular Cli Sommands

- ng new appname
    - flags (same flags may be available in other commands too)
        - --dry-run
        - --iniline-style
        - --inline-template
        - --routing
        - --prefix
        - --style
        - --skip-tests
- ng serve
    - flags

        - --port
        - --host
        - --ssl
        - --ssl-key
        - --ssl-cert
        - --open
- ng lint
    - flags
        - --fix
- ng test
- ng build
    - flags
        - --prod
        - --build-optimizer
        - --aot
        - --target
- ng g cl class-name
- ng g c component-name
    - flags
        - --spec
        - --view-encapsulation
        - --flat
        - --selector
- ng g d directive-name
- ng g e enum-name
- ng g m module-name
- ng g p pipe-name
- ng g s service-name

Understanding Basic Debugging

- Console.log(), console.debug(), console.warn(), console.info(), console.error()
- console.table();
- console.time();console.timeEnd();
- console.trace();
- debug(fn);
- debugger;

- console.log('%c ' + question, 'background: #222; color: #bada55');
- monitor(fn);

Understanding File Structure

- Angular Cli and Webpack
- package.json
    - ~(supports patch release)
    - ^(supports minor release)
    - refer semver for more versioning details
- Angular.json / Angular-cli.json(version <=5)
- main.ts
- Appmodule.ts
- Dependancy Injection

HTML Best Practices

- Reset.css
- Getting Most Out of Html5
    - <article>
    - <aside>
    - <details>
    - <figcaption>
    - <figure>
    - <footer>
    - <header>
    - <main>
    - <nav>
    - <section>
    - <summary>

Components

- Decarators
- Constructor
- Template
- Styles
- Template Expression / bindings {{}}

Structural Directives

- *ngFor
- *ngIf
- *ngSwitch

Conditional Styling

- [style.stylename] ----->apply single style on condition
- [ngStyle] ----->apply multiple styles on condition
- [ngClass] ----->apply multiple class on condition
- [class.classname] ----->apply single class on condition

Component Interaction

- Input [ ]
    - example

      <child-comp [name]="firstname"></child-comp>

      .....

      @Input() name:string;
- Output (event emitter) ( )
    - example

      <child-comp (test)="childEvent($event)"></child-comp>

      .....

      @Output() test:EventEmitter<string> = new EventEmitter();

- Template reference (or) local variables (#refence)
- Events
    - example (built in events)
        - (focus)="myMethod()"
        - (blur)="myMethod()"
        - (submit)="myMethod()"
        - (scroll)="myMethod()"
        - (cut)="myMethod()"
        - (copy)="myMethod()"
        - (paste)="myMethod()"
        - (keydown)="myMethod()"
        - (keypress)="myMethod()"
        - (keyup)="myMethod()"
        - (mouseenter)="myMethod()"

        - (mousedown)="myMethod()"
        - (mouseup)="myMethod()"
        - (click)="myMethod()"
        - (dblclick)="myMethod()"
        - (drag)="myMethod()"
        - (dragover)="myMethod()"
        - (drop)="myMethod()"

- Input, Output Aliasing
    - @Output('test') testChild = new EventEmitter<any>();
    - @Input('name') firstName : string;

Troube Shooting Component

- Declarations
- Circular Dependency
- Safe Traversal ?
- ngNonBindable -->{{ raw word }}

Syntax Usage

- https://angular.io/guide/cheatsheet

Component Style Guide

- one component in one file
- small functions: max line 75
- File naming convention: filename.type.ts
- use - for descriptive name: shopping-kart.component.ts
- Do use UpperCamelCase for class names.
- Do match the name of the symbol to the name of the file.
- selector name should be seperated with - and must have an prefix(app-shopping-kart) kebab-case
- const - lowerCamelCase
- Interface - UpperCamelCase (avoid I prefix)
- Properties and methods - lowerCamelCase
- leaving one empty line between third party imports and application imports.
- Always extract styles and templates to external files.
- Always use decorators for input and output.
- Avoid aliasing input and output

Deployment

- Production Build
- Deploying in Server
- live-server
- now

Custom Directives

- @Directive() decorator
- ElementRef
- TemplateRef
- ViewContainerRef
- Renderer2
- @HostListener()
- @HostBinding()

Pipes

- Built in pipes
    - Date pipe
    - Currency pipe
    - Decimal pipe
    - TitleCase pipe
    - LowerCase pipe
    - UpperCase pipe
    - SlicePipe
    - PercentPipe
    - Json pipe
- Custom pipes
    - @Pipe() decorator
    - transform()
    - impure pipe