Lesson 02 Demo 01

Component Level interactions

Objective: To setup the communication between the nested components using the @input and @output decorators.

Tools required: Ubuntu, Visual Studio, Node.js, and Angular

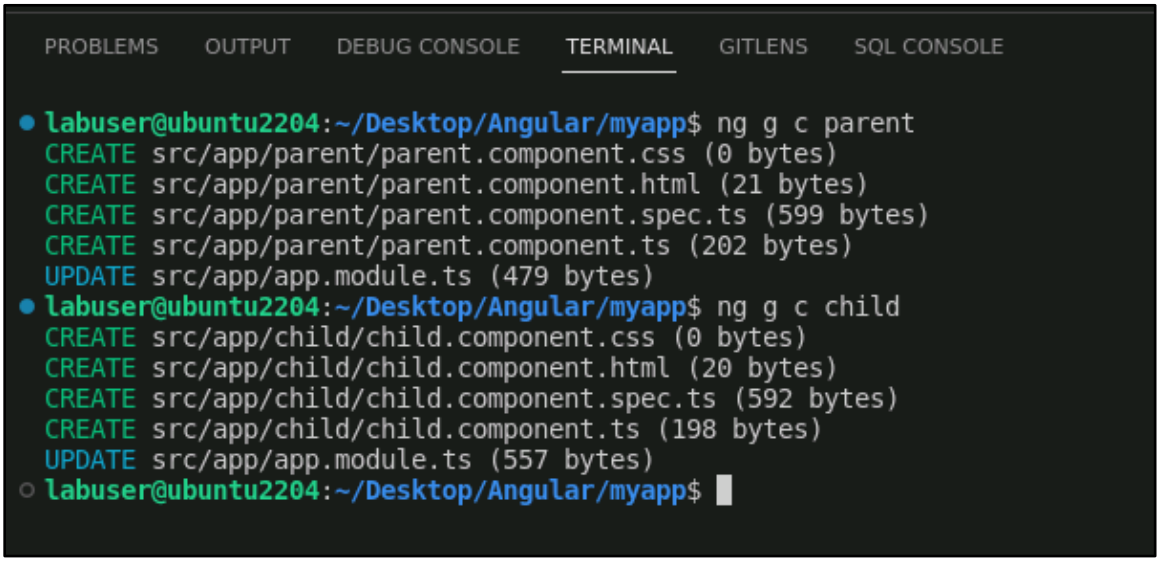
Prerequisites: Knowledge of JavaScript, Typescript, and Node.js

Steps to be followed:

1. Implementing the nested component that can communicate using the @input and @output decorators

Step 1: Implementing the nested component that can communicate using the @input and @output decorators:

1.1 Create the parent and child components using **ng g c parent** and **ng g c child** commands



1.2 Copy the below code into the **parent.component.ts** file:

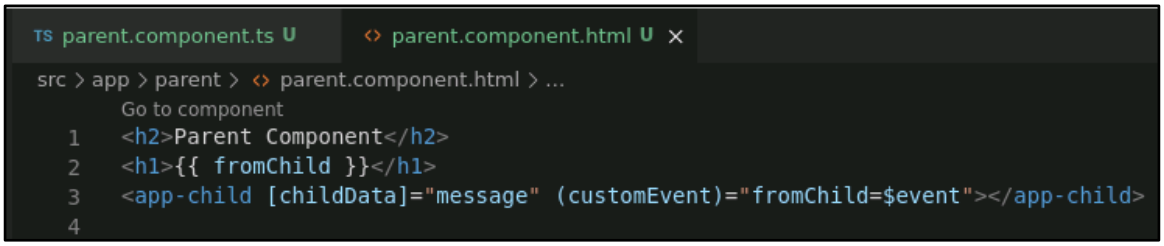
import { Component } from '@angular/core';

```
@Component({
 selector: 'app-parent',
 templateUrl: './parent.component.html',
 styleUrls: ['./parent.component.css']
})
export class ParentComponent {

 message = 'Hi from Parent Component'

 fromChild = '';
 }
```

1.3 Copy the below code into the **parent.component.html** file:

```
<h2>Parent Component</h2>
<h1>{{ fromChild }}</h1>
```

<app-child [childData]="message" (customEvent)="fromChild=$event"></app-child>



1.4 Copy the below code into the **child.component.ts** file:

```
import { Component, EventEmitter, Input, Output } from '@angular/core';
@Component({
 selector: 'app-child',
 templateUrl: './child.component.html',
 styleUrls: ['./child.component.css']
})
export class ChildComponent {

 @Input()
 childData = ''

 @Output()
 customEvent = new EventEmitter()

 onClickHandler(){
  this.customEvent.emit('Hi from Child')
 }
}
```

1.5 Copy the below code into the **child.component.html** file:

```
<h2>Child Component</h2>
<h1>{{ childData }}</h1>
<button (click)="onClickHandler()" >Send Data</button>
```

1.6 Copy and paste the below-mentioned code into the **app.component.html** file:

```
<div class="container">
  <app-parent></app-parent>
</div>
```

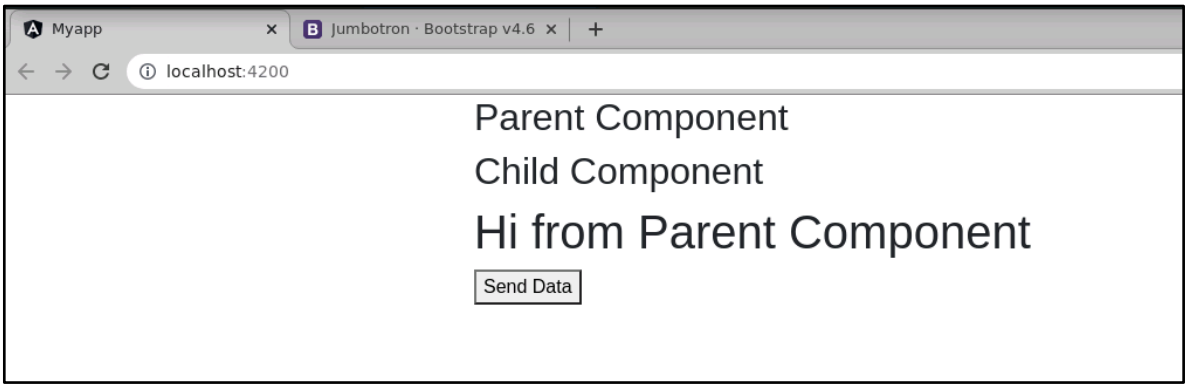
```
TS parent.component.ts U        <> parent.component.html U
src > app > <> app.component.html > ...
      Go to component | ...
1   <div class="container">
2       <app-parent></app-parent>
3   </div>
4
```

1.7 Start the server using the **ng s -o** command

```
labuser@ubuntu2204:~/Desktop/angular-project/myapp$ ng s -o
✔ Browser application bundle generation complete.

Initial Chunk Files   | Names         |  Raw Size
vendor.js             | vendor        |   2.04 MB |
polyfills.js          | polyfills     | 314.26 kB |
styles.css, styles.js | styles        | 209.39 kB |
main.js               | main          |   7.67 kB |
runtime.js            | runtime       |   6.51 kB |

                      | Initial Total |   2.56 MB

Build at: 2023-02-01T18:53:58.507Z - Hash: d671567c6946c425 - Time: 9044ms

** Angular Live Development Server is listening on localhost:4200, open your browser on http://localhost:4200/ **


✔ Compiled successfully.
```

1.8 Open the browser and verify the output

1.9 **http://localhost: 4200/**



1.10 Click on the **Send Data** button to view the output shown below:

Note: The objective to set up communication between the nested components is achieved.