Exercise (Instructions): Angular Components Part 1

Exercise Resources

[images.zip](https://d3c33hcgiwev3.cloudfront.net/_db284e833226b010f3e252d9220f85d5_images.zip?Expires=1582675200&Signature=Te7XejVcpd8u2wX7JbSKagGJOsMBL28bmHEOwhQLWMgGO3c5JBYfRMzlr5Wu49nDHsvls8li1XyVEcfTQBi0Xe7a8UfaI96QVYm1~pIKuGLnhbfjRYoeduXvaBhKsj6A-RRLbpOCWjFkDf~PUH56IsQhNfxZ6pEhFUCa2Dco3Ks_&Key-Pair-Id=APKAJLTNE6QMUY6HBC5A)

Objectives and Outcomes

In this exercise you will add the first component to your Angular application and update its template. At the end of this exercise you will be able to:

* Add components to your Angular application
* Update the templates of your component.

Adding a Menu Component

* First, download the images.zip file provided above and then unzip the file. Move the resulting *images* folder containing some PNG files to the Angular project's *src/assets* folder. These image files will be useful for our exercises.
* Next, use the CLI's *ng generate* command to generate a new component named menu as follows:

ng generate component menu

* This will create the necessary files for the menu component in a folder named *menu*, and also import this component into *app.module.ts*.
* Next, open app.component.html file and add the following after the toolbar:

<app-menu></app-menu>

Creating the Menu

* Next, create a folder named *shared* under the *src/app* folder. To this folder, add a file named dish.ts with the following code:

export class Dish {

id: string;

name: string;

image: string;

category: string;

featured: boolean;

label: string;

price: string;

description: string;

}

* Update menu.component.ts as follows to add in the data for four menu items:

. . .

import { Dish } from '../shared/dish';

. . .

export class MenuComponent implements OnInit {

dishes: Dish[] = [

{

id: '0',

name: 'Uthappizza',

image: '/assets/images/uthappizza.png',

category: 'mains',

featured: true,

label: 'Hot',

price: '4.99',

// tslint:disable-next-line:max-line-length

description: 'A unique combination of Indian Uthappam (pancake) and

        Italian pizza, topped with Cerignola olives, ripe vine cherry tomatoes,

        Vidalia onion, Guntur chillies and Buffalo Paneer.'

},

{

id: '1',

name: 'Zucchipakoda',

image: '/assets/images/zucchipakoda.png',

category: 'appetizer',

featured: false,

label: '',

price: '1.99',

description: 'Deep fried Zucchini coated with mildly spiced Chickpea flour

        batter accompanied with a sweet-tangy tamarind sauce'

},

{

id: '2',

name: 'Vadonut',

image: '/assets/images/vadonut.png',

category: 'appetizer',

featured: false,

label: 'New',

price: '1.99',

description: 'A quintessential ConFusion experience, is it a vada or is it

        a donut?'

},

{

id: '3',

name: 'ElaiCheese Cake',

image: '/assets/images/elaicheesecake.png',

category: 'dessert',

featured: false,

label: '',

price: '2.99',

description: 'A delectable, semi-sweet New York Style Cheese Cake, with

        Graham cracker crust and spiced with Indian cardamoms'

}

];

. . .

}

* Next, update the menu.component.html template as follows:

<div class="container"

fxLayout="column"

fxLayoutGap="10px">

<mat-list fxFlex>

<mat-list-item \*ngFor="let dish of dishes">

<img matListAvatar src={{dish.image}} alt={{dish.name}}>

<h1 matLine> {{dish.name}} </h1>

<p matLine>

<span> {{dish.description}} </span>

</p>

</mat-list-item>

</mat-list>

</div>

* Next, open *app.module.ts* and update it as follows:

. . .

import { MatListModule } from '@angular/material/list';

. . .

imports: [

. . .,

MatListModule,

. . .

],

. . .

* Add the following CSS class to styles.scss file:

.container {

margin: 20px;

display:flex;

}

* Save all changes and do a Git commit with the message "Components Part 1".

Updating the Menu Template

* Open *menu.component.html* and update its content as follows:

<div class="container"

fxLayout="column"

fxLayoutGap="10px">

<div fxFlex>

<div>

<h3>Menu</h3>

<hr>

</div>

</div>

<div fxFlex>

<mat-grid-list cols="2" rowHeight="200px">

<mat-grid-tile \*ngFor="let dish of dishes">

<img height="200px" src={{dish.image}} alt={{dish.name}}>

<mat-grid-tile-footer>

<h1>{{dish.name | uppercase}}</h1>

</mat-grid-tile-footer>

</mat-grid-tile>

</mat-grid-list>

</div>

</div>

* Here we are using the Grid list Angular material component to display the information.
* Open *app.module.ts* and update it as follows:

. . .

import { MatGridListModule } from '@angular/material/grid-list';

import { MatCardModule } from '@angular/material/card';

import { MatButtonModule } from '@angular/material/button';

. . .

imports: [

. . .,

MatGridListModule,

MatCardModule,

MatButtonModule,

. . .

],

. . .

* Also, update the *menu.component.ts* file as follows to move the details of the dishes into a constant, in preparation for introducing services in a future exercise:

. . .

const DISHES: Dish[] = [

. . .

];

. . .

export class MenuComponent implements OnInit {

dishes = DISHES;

selectedDish = DISHES[0];

. . .

}

Add a Card Component

* Update the menu.component.html template to display the details of a selected dish using the Material Card component as follows:

<div fxFlex \*ngIf="selectedDish">

<mat-card>

<mat-card-header>

<mat-card-title>

<h3>{{selectedDish.name | uppercase}}</h3>

</mat-card-title>

</mat-card-header>

<img mat-card-image src={{selectedDish.image}} alt={{selectedDish.name}}>

<mat-card-content>

<p>{{selectedDish.description}}

</p>

</mat-card-content>

<mat-card-actions>

<button mat-button>LIKE</button>

<button mat-button>SHARE</button>

</mat-card-actions>

</mat-card>

</div>

* Save the changes and do a Git commit with the message "Components Part 2".