

ESE Practical lab Web Technology



Problem statement :

Write a program using angular to create shopping list.

Solution:

Folder Structure:

Shopping-List

- node_modules

- src

- assets

- favicon.ico

- index.html

- main.ts

- styles.css

- app

- app-routing.module.ts

- app.component.css

- app.component.html

- app.component.spec.ts

- app.component.ts

- app.module.ts

- shopping-list

- shopping-list.component.html

- shopping-list.component.ts

- shopping-list.component.spec.ts

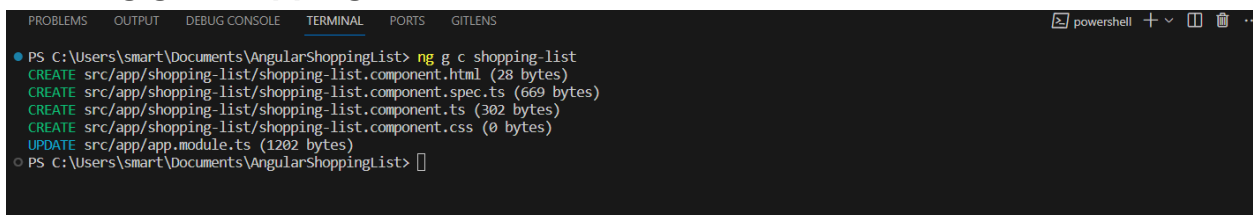
- shopping-list.component.css

1. Create angular app in desired directory by command -
ng new shopping-list

2. Index.html is entry point it looks like

```
<!doctype html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title>ShoppingList</title>
  <base href="/">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="icon" type="image/x-icon" href="favicon.ico">
</head>
<body>
  <app-root></app-root>
</body>
</html>
```

Now generate component shopping-list by command-
ng g c shopping-list



```
PS C:\Users\smart\Documents\AngularShoppingList> ng g c shopping-list
CREATE src/app/shopping-list/shopping-list.component.html (28 bytes)
CREATE src/app/shopping-list/shopping-list.component.spec.ts (669 bytes)
CREATE src/app/shopping-list/shopping-list.component.ts (302 bytes)
CREATE src/app/shopping-list/shopping-list.component.css (0 bytes)
UPDATE src/app/app.module.ts (1202 bytes)
PS C:\Users\smart\Documents\AngularShoppingList>
```

3. In the shopping-list/shopping-list.component.html file create the view of application :

```
<!-- src/app/shopping-list/shopping-list.component.html -->
<div class="shopping-list-container">
```

```

<h1>Shopping List</h1>
<h2>Let's go shopping. ...</h2>
<div class="input-container">
  <label for="item">Item:</label>
  <input id="item" [(ngModel)]="newItem" placeholder="Enter item" />
  <label for="quantity">Quantity:</label>
  <input
    id="quantity"
    [(ngModel)]="newQuantity"
    placeholder="Enter quantity"
  />
  <button (click)="addItem()">Add Item</button>
  <button (click)="removeItem(0)">Remove Item</button>
</div>
<table class="shopping-table">
  <thead>
    <tr>
      <th>Item Number </th>
      <th>Item</th>
      <th>Quantity</th>
      <th>Action</th>
    </tr>
  </thead>
  <tbody>
    <tr *ngFor="let item of shoppingItems; let i = index">
      <td>{{ i + 1 }}</td>
      <td>{{ item.name }}</td>
      <td>{{ item.quantity }}</td>
      <td>
        <button class="delete-btn" (click)="removeItem(i)">Remove
Item</button>
      </td>
    </tr>
  </tbody>
</table>
</div>

```



4. In the shopping-list/shopping-list.component.ts file write the logic of the addition and deletion of item imputed from html file.

```
// src/app/shopping-list/shopping-list.component.ts
import { Component } from '@angular/core';

@Component({
  selector: 'app-shopping-list',
  templateUrl: './shopping-list.component.html',
  styleUrls: ['./shopping-list.component.css'],
})
export class ShoppingListComponent {
  newItem: string = '';
  newQuantity: string = '';
  shoppingItems: { name: string; quantity: string }[] = [];

  addItem() {
    if (this.newItem && this.newQuantity) {
      this.shoppingItems.push({
        name: this.newItem,
        quantity: this.newQuantity,
      });
      this.newItem = '';
      this.newQuantity = '';
    }
  }

  removeItem(index: number) {
    this.shoppingItems.splice(index, 2);
  }
}
```

5. Add CSS to the html file for view
shopping-list.component.css

```
/* src/app/shopping-list/shopping-list.component.css */
.shopping-list-container {
  font-family: Georgia, 'Times New Roman', Times, serif;
  text-align: center;
  margin: 50px;
```



```
border-radius: 5%;
background-color: rgb(155, 126, 222);
border: 3px solid rgb(155, 126, 222);
color: rgb(0, 34, 128);
font-family: Arial, Helvetica, sans-serif;
}

.input-container {
margin-bottom: 20px;
display: flex;
flex-direction: column;
}

label {
margin: auto;
padding: 2px;
}

input {
margin: 4px auto;
border-radius: 5%;
padding: 8px;
}

button {
background-color: rgb(131, 33, 97);
border: 2px solid rgb(131, 33, 97);
border-radius: 10%;

color: white;
padding: 7px 10px;

margin: 6px auto;
cursor: pointer;
justify-content: center;
transition: background-color 0.3s;
}

button:hover {
background-color: tan;
```





```
}

.shopping-table {
  justify-content: center;
  align-items: center;
  margin: auto;
  width: 80%;
  text-align: center;
}

td,
th {
  border: 1px solid brown;
  padding: 8px;
}

th {
  padding-top: 12px;
  padding-bottom: 12px;
  text-align: left;
  background-color: rgb(188, 210, 238);
  color: rgb(82, 5, 10);
}

.delete-btn {
  background-color: red;
}

.delete-btn:hover {
  background-color: rgb(84, 3, 3);
}
```

6. In the app.module.ts file

```
import { NgModule } from '@angular/core';
import { BrowserModule } from '@angular/platform-browser';
import { FormsModule } from '@angular/forms';

import { AppRoutingModule } from './app-routing.module';
import { AppComponent } from './app.component';
```

```
import { ShoppingListComponent } from
'./shopping-list/shopping-list.component';

@NgModule({
  declarations: [
    AppComponent,
    ShoppingListComponent
  ],
  imports: [
    BrowserModule,
    AppRoutingModule,
    FormsModule
  ],
  providers: [],
  bootstrap: [AppComponent]
})
export class AppModule { }
```



Command for running the angular application

OutPut:

