Name : Vishwajeet Deshmukh

Enroll No: 2202815

Class : MSc CS Part-II

UIUX Practical Assignment

AngularJS

Q1. Accept a number from user, display its square.

```
my-app > src > app > TS app.component.ts > AppComponent
1    import { Component } from '@angular/core';
2    @Component({
3      selector: 'app-square',
4      template: `<input type="number" [(ngModel)]="num" />
5      <button (click)="squareNum()">Square</button>
6      <p>The square of the number is {{ square }}</p>`,
7    })
8    export class AppComponent {
9      num: number = 0;
10     square: number = 0;
11     squareNum() {
12       this.square = this.num * this.num;
13     }
14   }
```

Output :

| 20 | Square |

The square of the number is 400

Q2. Create 2 angular component named class and college, print "MSc (CS) part II" and

"Modern College" from respective classes. Call College component from root, and class

component from college.

Class.Component.ts file:

```
my-app > src > app > class > TS class.component.ts > ...
    1    import { Component } from '@angular/core';
    2    @Component({
    3    selector: 'app-class',
    4    templateUrl: './class.component.html',
    5    styleUrls: ['./class.component.css']
    6    })
    7    export class ClassComponent {
    8    className = "M.Sc.(Computer Science) Part - II";
    9    }
```

College.Component.ts file:

```
my-app > src > app > college > TS college.component.ts > ...
    1    import { Component } from '@angular/core';
    2    import { ClassComponent } from '../class/class.component';
    3    @Component({
    4    selector: 'app-college',
    5    templateUrl: './college.component.html',
    6    styleUrls: ['./college.component.css']
    7    })
    8    export class CollegeComponent {
    9    className = "Modern College of Arts, Commerce and Science";
   10    }
```

class.component.html file:

```
my-app > src > app > class > <> class.component.html > ...
1    <div>
2        <h2>My Class</h2>
3        <p>I am studying in {{className}}</p>
4        </div>
5
```

college.component.html file:

```
my-app > src > app > college > <> college.component.html > ⬦ div
1    <div>
2        <h2>My College</h2>
3        <p>I am from {{className}}</p>
4        <app-class></app-class>
5    </div>
```

app.component.html file:

```
my-app > src > app > <> app.component.html > ...
1    <div class="app">
2       <h1>Demonstration of Nested Components in AngularJS</h1>
3       <app-college></app-college>
4       </div>
```

Output :

Demonstration of Nested Components in AngularJS

My College

I am from Modern College of Arts, Commerce and Science

My Class

I am studying in M.Sc.(Computer Science) Part - II

Q.3 Accept a font size from user and apply it to following text using component directives:

Modern college of Arts, Science and Commerce.

font-size.component.ts file:

```
my-app > src > app > font-size > TS font-size.component.ts > ...
   1    import { Component } from '@angular/core';
   2    @Component({
   3    selector: 'app-font-size',
   4    templateUrl: './font-size.component.html',
   5    styleUrls: ['./font-size.component.css']
   6    })
   7    export class FontSizeComponent {
   8    fontSize = 15;
   9    }
```

font-size.component.html file:

```
my-app > src > app > font > <> font.component.html > ...
   1    <div class="app">
   2        <input type="number" [(ngModel)]="fontSize" />
   3        <p [style.font]="fontSize + 'px'">Modern College of Arts, Commerce and Science</p>
   4    </div>
```

app.component.html file:

```
my-app > src > app > <> app.component.html > ⊘ div.app
   1    <div class="app">
   2        <h1>Demonstration of how to use Component Directives in AngularJS</h1>
   3        <app-font></app-font>
   4    </div
```

Output :

Demonstration of how to use Component Directives in AngularJS

[15]

Modern College of Arts, Commerce and Science

Demonstration of how to use Component Directives in AngularJS

[30]

Modern College of Arts, Commerce and Science

Q.4 Accept a roll no from user and display student information using components.

student-service.component.ts file:

```
my-app > src > app > student-service > TS student-service.component.ts > ...
1    import { Injectable } from '@angular/core';
2    @Injectable({
3    providedIn: 'root'
4    })
5    export class StudentServiceComponent {
6    students: any[] = [
7    { rollNo: 2202815, name: 'Vishwajeet Deshmukh', class: 'M.Sc.(CS) Part -II' },
8    { rollNo: 2202411, name: 'Aman Inamdar', class: 'M.Sc.(CS) Part -II'},
9    { rollNo: 2202811, name: 'Akash Jagdale', class: 'M.Sc.(CS) Part -II'},
10   { rollNo: 2202512, name: 'Mayuresh Pawashe', class: 'M.Sc.(CS) Part -II'},
11   ];
12   constructor() { }
13   getStudentInfo(rollNo: number) {
14   return this.students.find(student => student.rollNo === rollNo);
15   }
16   }
```

student-info.component.ts file:

```
my-app > src > app > student-info > TS student-info.component.ts > ...
1    import { Component } from '@angular/core';
2    import { StudentServiceComponent } from '../student-service/student-service.component';
3    @Component({
4    selector: 'app-student-info',
5    templateUrl: './student-info.component.html',
6    styleUrls: ['./student-info.component.css']
7    })
8    export class StudentInfoComponent {
9    rollNo!: number;
10   studentInfo: any;
11   constructor(private studentService: StudentServiceComponent) { }
12   getStudentInfo() {
13   this.studentInfo = this.studentService.getStudentInfo(this.rollNo);
14   }
15   }
```

student-info.component.html file:

```html
my-app > src > app > student-info > <> student-info.component.html > ...
1   <div>
2       <h1>Student Information</h1>
3       <input type="number" [(ngModel)]="rollNo" placeholder="Enter the roll number here..." />
4       <br /><br />
5       <button (click)="getStudentInfo()">Get Student Info</button>
6       <p *ngIf="studentInfo">
7       Name: {{studentInfo.name}}
8       <br>
9       Class: {{studentInfo.class}}
10      </p>
11      </div>
```

app.component.html file:

```html
my-app > src > app > <> app.component.html > <> div
1   <div>
2       <app-student-info></app-student-info>
3   </div>
```

Output :

Student Information

2202811

Get Student Info

Name: Akash Jagdale
Class: M.Sc.(CS) Part -II