FUIL Stack Web Development Lab (PMCAGO1P)

23McALo3o Vinayak Kumar Singh.

1). Develop SPA using Agular for university management system.

Step 1: Create Basic Structure of Angular App

·ng new university-management-system

· Cd university-management-system

· ng generate component students

·ng generate component courses

Step 2: Define routes in app-routing, module. +s

import [Ng Module I from '@angulas/core';

import (Router Module, Routes) from '@ angular/ router import (Browser Module > from '@ angular/ router)

import (Browser Module & from '@ angulus / Platform

import { H++p(lient Module } from '@ angular/common)

import (Students Component) from 1.1Students / Students. Component

import { Courses Component 3 from '. / courses /

Const routes: Routes=[

¿ pata: 'Students', component: Students Component },

(putn: 'Courses', Component: Courses Component 3,

(ourses component)

[path: ", redirect To: ", puth Match: full'3,

];

@ Ny Module ({

imports: [Browser Module, HttpClient Module, Router Module. For RDO+ (routes)],

Exports: [Router Module]

رح

Export class AppRouting Mudule & 3

```
Step3: Students. Components. +s
         Ecomponent & from @angular lase!
 import +
  @ Component ({
     Selector: 'app-Students'
     templateuri: './student.component.n+mi'
                   ['. / Students. Component. Css']
      Style URIS:
     3)
   Export Class Students Component {
       mcaStudents = [
          name: 'Vinayak Singh'
           roll Number: '23MCA L030',
            email: 'Uinayak Kumar. Singh 2023@ vit Student
            Phone Number: '9630576848'
         3
          Mame: 'Pankaj Singh'
           rollnumber: 123mcALO70'
           e-mail: 'pankaj. 2023a @vit student. ac.in'
            Phone Number: '9004506 586'
            name: 'Raj Gupta'
            roll Number: 23 McA +060
             email: 'raj. gupta 2023@ vit Student. ac.in',
             Phone (Number: '9102642148
             name: 'Atul Kumar!
             WII Number: 23 MCA LOGE
             email: cutu 1. Kuma 22023 @ vitstudent.ac.in'
              Phone Wrnber: '9057 592022'
              name: Sanchit Rai
               HOHNUMBEY: 23MCALL 2
               Email: Sanchit. raj @2023@ Vitstudent. ac.in
               Phone Number: '$20040 60 35'
                name: Rupayan Paul
                rollnumber: '23 mcA toop!
                email: 'rupayan. paul 2023 @ vit Student. ac.in'
                 Phone rumber: '6900938038'
           27,3,
```

```
Stepy: Students. component. html
  (div class = "Students-container">
   (h2 Style = "margin: opx;" > McA Students (lh2)
    Cdiv *ng For = "let Student of mcastudents"
       Class = "student-card">
     Cing[sxc] = "https://img. freepik.com/premium-vactor)
                  autax-profile-icon_ 188 544-4755. 100111
       ait= "studerd Image">
        <diu cous = "Student-details">
        < h3 > Name: {{ Student. name }} < /h3)
         <P>> Roll Number: EEStudent. roll number 33 
          CP> Email: {{ Student, email }} 4P>
          < P> Phone number: [( Student. phone number ?)
                                                       (10)
          くしタック
        </ri>
       CIGIUS
Steps: Courses. Component, +s
   import (component) from 'Cangular/core';
   @ component ({
       Selector: 'app-courses',
       template UNI: 1.1 courses. component. html;
        Styleuris : ['. / Courses. Component. CSS']
     Export class Courses Component &
         Courses: any[] =[
        Sid: 1, course Name: 'probability and Statistics'
          Credit : 3, Semester : 13
         (id: 2, Course Name! Data Structure and
            Aryonthms', credit: 4, semester: 13,
          Eid: 3, Course Name! Foll Stack Webdevelopment,
            Credit: 5, Semester: 13,
         Eid: 4, Course Name: Python programming!
             Czedit: 3, Semester: 13,
           Sid: 5 Course Name: Software Engineering!
              Credit: 4, Semester: 13,
            (id: 6, course Name: 'Database Systems',
               Credit: 3, semester: 23,
             (id: 7, Coursename: 'Qualitative Skills'
                Credit: 2, semester: 13,
```

```
(id: 8, coasename: Technical Reportuniting, Credit: 3,
  Semester: 13,
(id:9, Course Name: 'Java Programming', Credit:3,
   Semester: 23,
Eid: Lo, Course Name: Data Communication and Network!
   credit: 3, semester: 23,
  Lid: 11, course Name: 'cloud Computing', credit: 3.
    Semester: 23,
  Eid: 12, Course Name: Machine Learning', Credit:3,
      semester: 23.
    [id: 13, Course Name: Big Data Analytics, Colditis,
       Semester: 23,
    {id: 14, course Name: Block chain Technologies',
        Credit: 3, semester: 23,
      { id : 15, Course Name: 'Technical Reporturiting'
          Credit: 3, Semester: 23,
      {id: 16, Course Name: Software Testing,
          Credit: 3, semester: 23,
       Sid: 17, course Name: Quantitative Skills
         practice', credit: 3, Semester: 23,
       Sid: 18, Course Name: Advanced Competitive
          Coding, credit: 3, Semester: 23,
       3;
      has courses For Sernester (semester: number):
        boolean {
        geturn this. Courses. Some (course =) course. Semes.
          ter == = Semester);
         get Courses Forsemester (semester: number): anyo
          Exeturn this . courses. filter (course =) course.
             Semester === Semester);
```

```
Step 6: Courses. Component. html
  (div Class= "tables-container")
    (table class = "left-table")
             SHARE AND AND TO THE SHARE SHEET WAS
(thead)
      <+8>
      (+n) Title (1+n)
       C+n) (redit (1+n)
     CHON AND MINISTER PRODUCTION STORY
       Cltheads
       <+body>
         (+r +ngfor="let course of get courses for Semester (1)"
         > SE Course. Course Name 3 > 
          <4d> {{ Carse. Credit 3} < 1+d>
                 ( id : 15, Course Nume: 'T
          <1487
          (1+budy)
          CItable>
       (table class = "right-table")
         (thead)
          >
            Cths Title (1ths
  (+n) (redit (1th)
            < (tr> > 0 ( ) + 1 + 1 b > 2 ( ) ( ) b >
           <1thead>
         <tr* ng For = "let course of get course For something</pre>
                      (2)">
           <+d>{{ Coorse, coverenamezy <1+d>
          <+d>>{+d>{( course . Credi+3} < 1+d>
recommend with
          </+600>
 < Itable)
          (Vibl)
```

```
Step 7: app. Component. +s
impost [component] from @angular/lore";
  @component ( {
     Selector: 'app-tout'
      templateuri: '. /app. component h+mi'
       Style UTIS: ('. /app. component. CSS')
      3)
       EXPORT CLOSS Applomponent &
          title = university-management-system!
Step 8: app. component. html
 (header)
   < n1 > UIT Chennai university Management 5-45+cm 4/12
   < 4:0>
    Ch3) Name: Vinayak Kumar Singh (br)
         Register number: 23MCA+030 </n3)
     < Idiv>
   (Iheader)
    (div 1d="app-container">
    (divid = "main - container")
      (diu id = "Content - Container">
       Cdiv Class = "department-info">
         (h2) MCA Depustment (h2)
       The master of computer Application (ma)
       department at VIT Chemai is committed
        to providing quality education in the field
         of computer applications. 
       (app-courses) (/app-courses)
        Capp- Students> (lapp. students)
        < 19:07
         </diu>
Step 9: Rum the application: ng Serve
```

2) pevelop SPA with 2 Child components. In one Component display the name of Student In another display name, regno and marks of the Student. Create the array of Students in a Service Class . Feten the every detwis in Components and perform dependency injection approxiately.

Step 1: ng new Student-app

Step 2: Student. Senice.ts

import { Injection} from @angular/core";

@ Injection(&

Provide In: '2007)

Expurt Class Student Service &

Private Students: any [] = [

{ name: Vinayak Singh', regNo: 23MCA Lo301 marks: 90] Ename: Pankaj Singhi, reg No: 23MCA toto, markes: 50} Shame: 'Raj Gupta', reg No: '23mcp +060', marks: 95) {name: Atus Kurnar; regno: '23MCA to 68', marks: 75}, Ename: Sanchit Raj!, regno: '23 mcA +112', marks: 75} I name: 'Rupayan Paul', regno: '23mcA Loo8', marker: 453,

get Students(): any() { geturn this students;

```
Step 3: Student-name. component. ts
 import (component 3 from '@angular/core';
  import { studentservice 3 from '. / student · service ';
  @ component ({
      Selector: 'app-Student-name!
   template:
         (hz) Student Name </nz)
          2015
          < 11 * My Fox="let Student Of Students">
             E & Student name 33 </i>
          C/01>
          \mathcal{Y}
       Export Class Student Name Component {
          Students: any [];
          Constructor (private studentservice: Student
            this . Students = this student Service, get student;
 Stepy: Student-details. component.ts
   import [component & from 'Eanguar /core';
   import Estudent service 3 from '. / Stracut . Service ';
    @ Component (§
        Selector: app - Student - details!
        template:
           (h2) Street Details (In2)
           (10)
           <11 *ngFor="let Student of Students">
           <b> > Name: <1b> {{Student. name }} .<b>>
           (b) Reg No: (16) { Student regno 33, (67)
             (b) marks: <1b> {15tudent.mark}
             <117
             <101>
           Export class Student petails component (
               Students: amy [];
            Constructor convak student service: Street service
            this. Students = this student service get students e);
```

```
Step 5: app. modulets
import [ng Module ) from @anguar (core);
 import & Browser Module 3 from Cangular / plotform-
  import EAPPCornponent 3 from '. /app. Component
   import & Student Name Component & from ! 1Student
    name. Component ";
   import & Student Details Component I from '. 1student
    details. Component;
   import Estudent Service & from 1. / Student Service.
  @ Ny Module ( &
     declarations: [
         APP Component,
        Student Nume Component,
         Student betwis Component
      ); strodui
           Browsermodule
       Providers: Listudent Service ]
       boutstrap: CAPP Component >
     Export Class Appmodule 23
        app. component. html
   < h1> Student APP < H1>
    Capp-Student-names </app-student-names
     Capp- Student - details> < lapp- Student - details)
```

Step 7: app-Souting. Module. ts

import Ing Module 3 from '@anguar/core';

import & Router Module, Routes 3 from '@anguar/souter';

Const Doutes: Routes = [];

@ Ng Module (&

imports: [Router Module. for Rout (routes)],

Exports: [Router Module]

?)

Export Class App Routing Module { }

Step 8: ng Serve

__X __