Student API – CRUD Operations with ASP.NET Web API

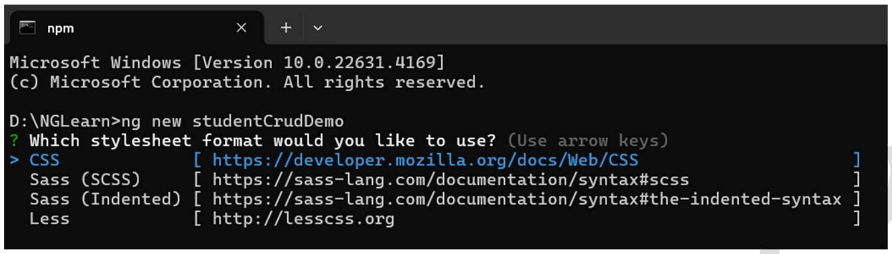
Agenda

- Angular Application having a Home Page and a Navigation Bar
- Install bootstrap
- Implementing Routes and link to CRUD based Links
- Components
    - **studentList**
    - **addStudent**
    - **studentDetails**
    - **deleteStudent**
- Student List Component
- Add New Student Component
- Student Details Component
- Delete a Student Component
- ASP.NET Core Web API
    - Create a student table in SQL Server
    - Create Web API using ASP.NET Core and entity framework
- Test Web API
- Final Application Execution

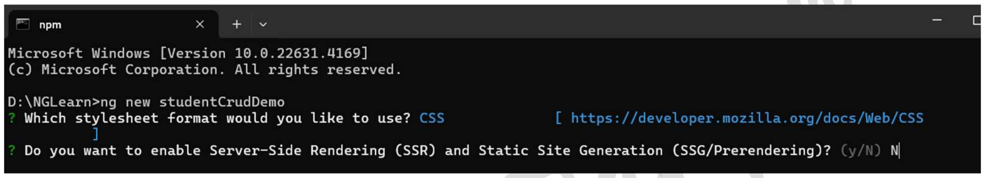
Angular Application having a Home Page and a Navigation Bar

- In my D drive I created a folder named NGLearn. And now go to terminal/ command prompt and use NG CLI command to create angular application.
- Create a basic Angular Application → studentCrudDemo

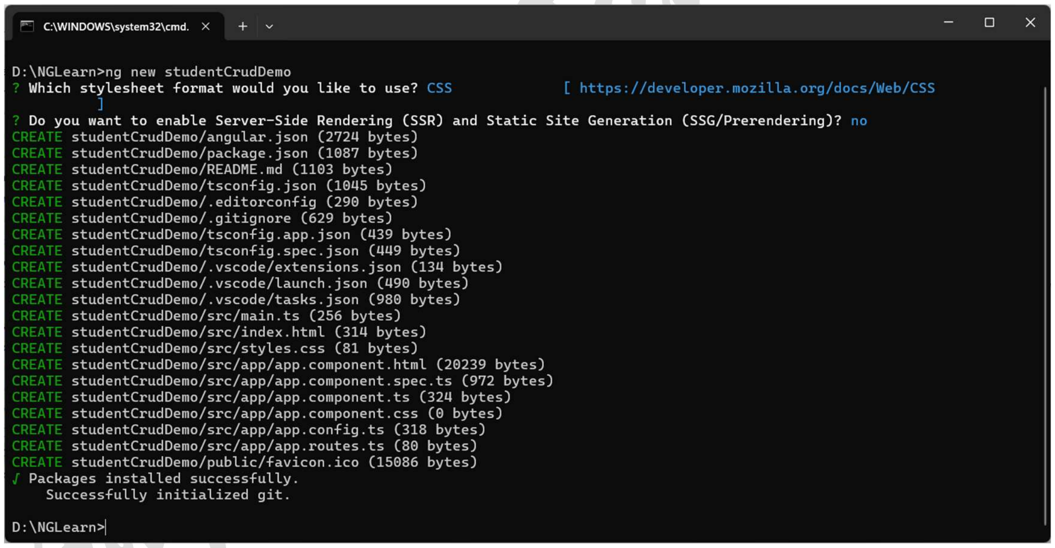
> ng new studentCrudDemo



```
Microsoft Windows [Version 10.0.22631.4169]
(c) Microsoft Corporation. All rights reserved.

D:\NGLearn>ng new studentCrudDemo
? Which stylesheet format would you like to use? (Use arrow keys)
> CSS             [ https://developer.mozilla.org/docs/Web/CSS                     ]
  Sass (SCSS)     [ https://sass-lang.com/documentation/syntax#scss                ]
  Sass (Indented) [ https://sass-lang.com/documentation/syntax#the-indented-syntax ]
  Less            [ http://lesscss.org                                             ]
```



```
Microsoft Windows [Version 10.0.22631.4169]
(c) Microsoft Corporation. All rights reserved.

D:\NGLearn>ng new studentCrudDemo
? Which stylesheet format would you like to use? CSS             [ https://developer.mozilla.org/docs/Web/CSS
         ]
? Do you want to enable Server-Side Rendering (SSR) and Static Site Generation (SSG/Prerendering)? (y/N) N
```



```
D:\NGLearn>ng new studentCrudDemo
? Which stylesheet format would you like to use? CSS             [ https://developer.mozilla.org/docs/Web/CSS
         ]
? Do you want to enable Server-Side Rendering (SSR) and Static Site Generation (SSG/Prerendering)? no
CREATE studentCrudDemo/angular.json (2724 bytes)
CREATE studentCrudDemo/package.json (1087 bytes)
CREATE studentCrudDemo/README.md (1103 bytes)
CREATE studentCrudDemo/tsconfig.json (1045 bytes)
CREATE studentCrudDemo/.editorconfig (290 bytes)
CREATE studentCrudDemo/.gitignore (629 bytes)
CREATE studentCrudDemo/tsconfig.app.json (439 bytes)
CREATE studentCrudDemo/tsconfig.spec.json (449 bytes)
CREATE studentCrudDemo/.vscode/extensions.json (134 bytes)
CREATE studentCrudDemo/.vscode/launch.json (490 bytes)
CREATE studentCrudDemo/.vscode/tasks.json (980 bytes)
CREATE studentCrudDemo/src/main.ts (256 bytes)
CREATE studentCrudDemo/src/index.html (314 bytes)
CREATE studentCrudDemo/src/styles.css (81 bytes)
CREATE studentCrudDemo/src/app/app.component.html (20239 bytes)
CREATE studentCrudDemo/src/app/app.component.spec.ts (972 bytes)
CREATE studentCrudDemo/src/app/app.component.ts (324 bytes)
CREATE studentCrudDemo/src/app/app.component.css (0 bytes)
CREATE studentCrudDemo/src/app/app.config.ts (318 bytes)
CREATE studentCrudDemo/src/app/app.routes.ts (80 bytes)
CREATE studentCrudDemo/public/favicon.ico (15086 bytes)
√ Packages installed successfully.
    Successfully initialized git.

D:\NGLearn>
```

- Exit the CMD and open folder in Visual Studio Code
- Open a terminal window
- Install bootstrap

npm i bootstrap --save

- Add to angular.json file

```
"styles": [
              "node_modules/bootstrap/dist/css/bootstrap.css",
              "src/styles.css"
            ],
"scripts": ["node_modules/bootstrap/dist/js/bootstrap.js"]
```

- I want that an entire application background should be having a same background color, so added a style in D:\NGLearn\studentCrudDemo\src\styles.css

```
body {
  background-color: hsl(210, 100%, 85%);
}
```

- Add pages folder and create following components in pages folder

    PS D:\NGLearn\studentCrudDemo\src\app\pages> **ng g c studentList**
    PS D:\NGLearn\studentCrudDemo\src\app\pages> **ng g c addStudent**
    PS D:\NGLearn\studentCrudDemo\src\app\pages> **ng g c studentDetails**
    PS D:\NGLearn\studentCrudDemo\src\app\pages> **ng g c deleteStudent**
- Add routing to application
- In app.component.ts

```
import { Component } from '@angular/core';
import { RouterLink, RouterOutlet } from '@angular/router';

@Component({
  selector: 'app-root',
  standalone: true,
  imports: [RouterOutlet, RouterLink],
  templateUrl: './app.component.html',
  styleUrl: './app.component.css'
})
export class AppComponent {
  title = 'routedemo';
}
```

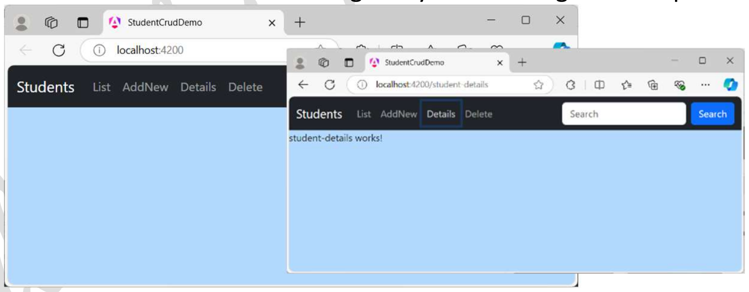
- Go to app.routes.ts

```
import { Routes } from '@angular/router';
import { StudentListComponent } from './pages/student-list/student-list.component';
import { AddStudentComponent } from './pages/add-student/add-student.component';
import { StudentDetailsComponent } from './pages/student-details/student-details.component';
import { DeleteStudentComponent } from './pages/delete-student/delete-student.component';

export const routes: Routes = [
    {
        path: 'student-list',
        component: StudentListComponent
    },
    {
        path: 'add-student',
        component: AddStudentComponent
    },
    {
        path: 'student-details',
        component: StudentDetailsComponent
    }, {
        path: 'delete-student',
        component: DeleteStudentComponent
    },
];
```

- Add a bootstrap sample navbar

```
<nav class="navbar navbar-expand-sm navbar-dark bg-dark">
  <div class="container-fluid">
    <a class="navbar-brand" href="javascript:void(0)">Students</a>
    <button
      class="navbar-toggler"
      type="button"
      data-bs-toggle="collapse"
      data-bs-target="#mynavbar"
    >
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="mynavbar">
      <ul class="navbar-nav me-auto">
        <li class="nav-item">
          <a class="nav-link" routerLink="student-list">List</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" routerLink="add-student">AddNew</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" routerLink="student-details">Details</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" routerLink="delete-student">Delete</a>
        </li>
      </ul>
      <form class="d-flex">
        <input class="form-control me-2" type="text" placeholder="Search" />
        <button class="btn btn-primary" type="button">Search</button>
      </form>
    </div>
  </div>
</nav>
<router-outlet />
```

- Now run application and check that links are working and you can navigate to respective contents


StudentCrudDemo
localhost:4200
Students List AddNew Details Delete
localhost:4200/student-details
Search
Search
student-details works!

Student List Component – Get all Student Records from API

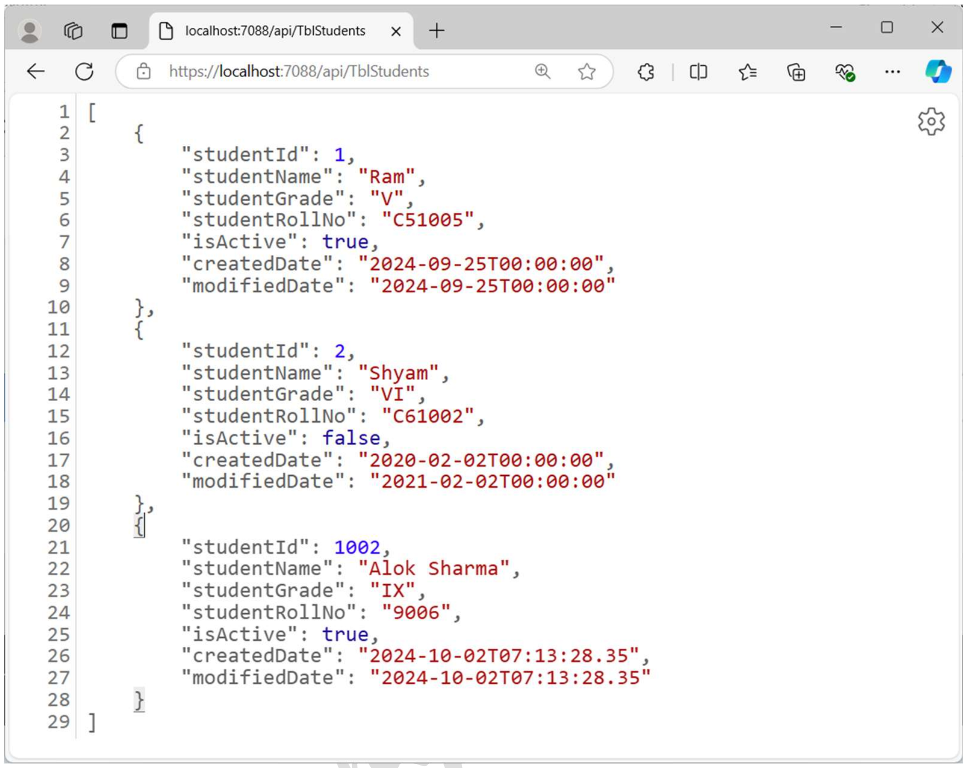
- Here we need to get data from student service.
- Add service folder and add student service in it.

ng g s student

- We need to use HttpClient so in app.config.ts add provider

```
import { ApplicationConfig, provideZoneChangeDetection } from '@angular/core';
import { provideRouter } from '@angular/router';

import { routes } from './app.routes';
import { provideHttpClient } from '@angular/common/http';

export const appConfig: ApplicationConfig = {
  providers: [provideHttpClient(), provideZoneChangeDetection({
eventCoalescing: true }), provideRouter(routes)]
};
```

- Now create a student service to get student data from API. This API we have generated using ASP.NET Core Web API with SQL Server and Entity Framework. Documentation is available separately check StudentAPI git folder for the same.
- API url is https://localhost:7088/api/TblStudents which return JSON as



```
[
    {
        "studentId": 1,
        "studentName": "Ram",
        "studentGrade": "V",
        "studentRollNo": "C51005",
        "isActive": true,
        "createdDate": "2024-09-25T00:00:00",
        "modifiedDate": "2024-09-25T00:00:00"
    },
    {
        "studentId": 2,
        "studentName": "Shyam",
        "studentGrade": "VI",
        "studentRollNo": "C61002",
        "isActive": false,
        "createdDate": "2020-02-02T00:00:00",
        "modifiedDate": "2021-02-02T00:00:00"
    },
    {
        "studentId": 1002,
        "studentName": "Alok Sharma",
        "studentGrade": "IX",
        "studentRollNo": "9006",
        "isActive": true,
        "createdDate": "2024-10-02T07:13:28.35",
        "modifiedDate": "2024-10-02T07:13:28.35"
    }
]
```

```
import { HttpClient } from '@angular/common/http';
import { Injectable } from '@angular/core';

@Injectable({
  providedIn: 'root'
})
export class StudentService {

  constructor(private http: HttpClient) { }

  getStudents() {
    return this.http.get("https://localhost:7088/api/TblStudents");
  }
}
```

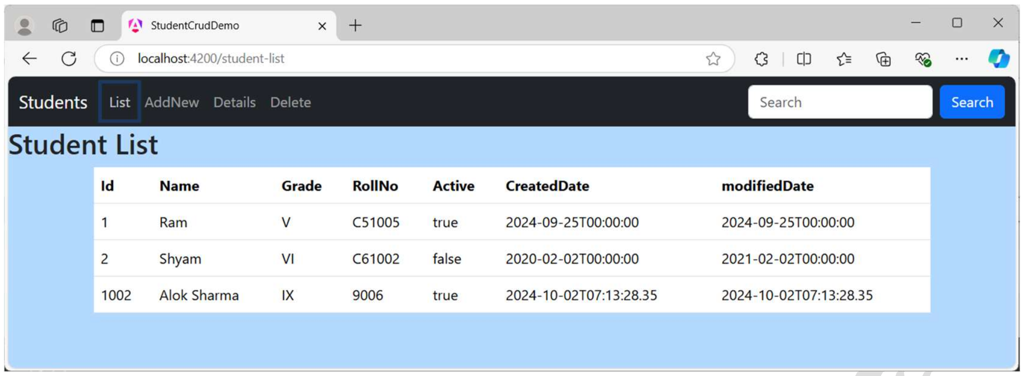
- Consume data obtained from API
- Go to student-list-component.ts and modify:

```
import { Component, inject, OnInit } from '@angular/core';
import { StudentService } from '../../service/student.service';
@Component({
  selector: 'app-student-list',
  standalone: true,
  imports: [],
  templateUrl: './student-list.component.html',
  styleUrl: './student-list.component.css'
})
export class StudentListComponent implements OnInit {
  studentService = inject(StudentService)
  studentList: any[] = [];
  ngOnInit(): void {
    this.loadStudents();
  }
  loadStudents() {
    this.studentService.getStudents().subscribe((res: any) => {
      this.studentList = res;
    })
  }
}
```

- Now the response obtained from API is collected into studentList array.
- Display studentList array data in HTML file of student-list component.
- Go to student-list.component.html and design as:

```
<h2>Student List</h2>
<div class="container">
  <div class="row">
    <div class="col-12">
      <table class="table table-borderd">
        <thead>
          <tr>
            <th>Id</th>
            <th>Name</th>
            <th>Grade</th>
            <th>RollNo</th>
            <th>Active</th>
            <th>CreatedDate</th>
            <th>modifiedDate</th>
          </tr>
        </thead>
        <tbody>
          @for (item of studentList; track $index) {
          <tr>
            <td>{{ item.studentId }}</td>
            <td>{{ item.studentName }}</td>
            <td>{{ item.studentGrade }}</td>
            <td>{{ item.studentRollNo }}</td>
            <td>{{ item.isActive }}</td>
            <td>{{ item.createdDate }}</td>
            <td>{{ item.modifiedDate }}</td>
          </tr>
          }
        </tbody>
      </table>
    </div>
  </div>
</div>
```

- Test it in browser:



localhost:4200/student-list

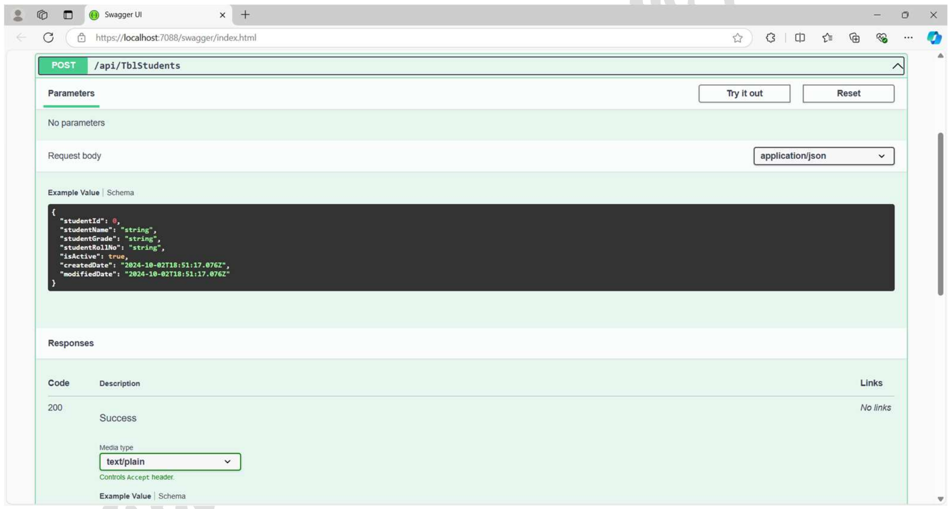
Students | List | AddNew | Details | Delete | Search

Student List

Id	Name	Grade	RollNo	Active	CreatedDate	modifiedDate
1	Ram	V	C51005	true	2024-09-25T00:00:00	2024-09-25T00:00:00
2	Shyam	VI	C61002	false	2020-02-02T00:00:00	2021-02-02T00:00:00
1002	Alok Sharma	IX	9006	true	2024-10-02T07:13:28.35	2024-10-02T07:13:28.35

Add-Student Component – Add New Student Records using API

- To add a new student record, we need to use a data entry form and need to post student object data to Web API. Api's post method make arrangement to store data in SQL Server database table. (Your API should be CORS enabled.)
- As in my API following is the POST section



https://localhost:7088/swagger/index.html

POST /api/TblStudents

Parameters — Try it out — Reset

No parameters

Request body: application/json

Example Value | Schema

```
{
  "studentId": 0,
  "studentName": "string",
  "studentGrade": "string",
  "studentRollNo": "string",
  "isActive": true,
  "createdDate": "2024-10-02T18:51:17.076Z",
  "modifiedDate": "2024-10-02T18:51:17.076Z"
}
```

Responses

Code	Description	Links
200	Success Media type: text/plain Controls Accept header. Example Value | Schema	No links

- Here if you try is out then you are allowed to add data by defining data items in JSON object

```
{
  "studentId": 0,
  "studentName": "string",
  "studentGrade": "string",
  "studentRollNo": "string",
  "isActive": true,
  "createdDate": "2024-10-02T18:51:17.076Z",
  "modifiedDate": "2024-10-02T18:51:17.076Z"
}
```

- Same we will be using in our Angular component to send object with data in add-student component.
- First create a Template Form to Add New Student

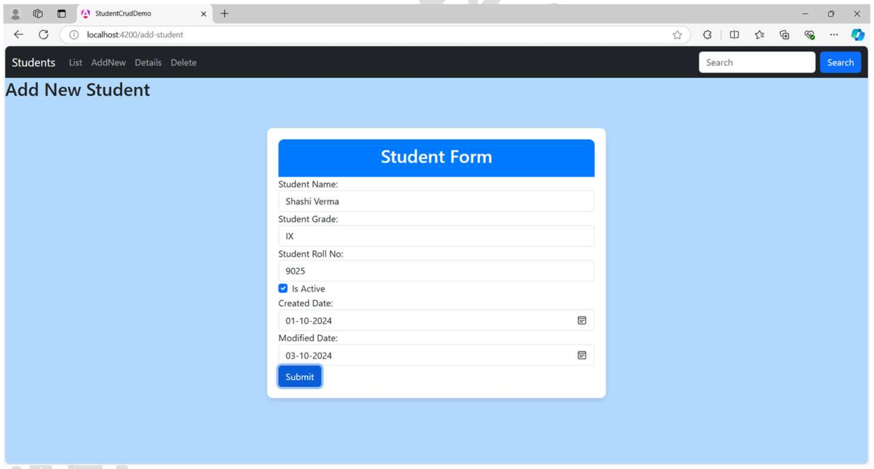
- While creating form we will not send StudentId as it is defined a primary key as well identity column. Autogenerated ID will be assigned to newly added record.
- In HTML below I commented the div for studentId as we are not submitting it.
- Go to add-student.component.html and design form as:

```
<h2>Add New Student</h2>
<div class="form-container">
  <div class="form-header text-center">
    <h2>Student Form</h2>
  </div>
  <form id="studentForm">
    <!-- <div class="form-group">
      <label for="studentId">Student ID:</label>
      <input type="number" class="form-control" id="studentId" name="studentId"
        Required />
    </div> -->

    <div class="form-group">
      <label for="studentName">Student Name:</label>
      <input
        type="text"
        [(ngModel)]="studentObj.studentName"
        class="form-control"
        id="studentName"
        name="studentName"
        required
      />
    </div>

    <div class="form-group">
      <label for="studentGrade">Student Grade:</label>
      <input
        type="text"
        [(ngModel)]="studentObj.studentGrade"
        class="form-control"
        id="studentGrade"
        name="studentGrade"
        required
      />
    </div>

    <div class="form-group">
      <label for="studentRollNo">Student Roll No:</label>
      <input
        type="text"
        [(ngModel)]="studentObj.studentRollNo"
        class="form-control"
        id="studentRollNo"
        name="studentRollNo"
        required
      />
    </div>

    <div class="form-group form-check">
      <input
        type="checkbox"
        [(ngModel)]="studentObj.isActive"
        class="form-check-input"
        id="isActive"
        name="isActive"
        checked
      />
      <label class="form-check-label" for="isActive">Is Active</label>
    </div>

    <div class="form-group">
      <label for="createdDate">Created Date:</label>
      <input
        type="date"
        [(ngModel)]="studentObj.createdDate"
        class="form-control"
        id="createdDate"
        name="createdDate"
        required
      />
    </div>

    <div class="form-group">
      <label for="modifiedDate">Modified Date:</label>
      <input
        type="date"
        [(ngModel)]="studentObj.modifiedDate"
        class="form-control"
        id="modifiedDate"
        name="modifiedDate"
      />
    </div>

    <button
      type="submit"
      class="btn btn-primary btn-block"
      (click)="onSubmit()"
    >
      Submit
    </button>
  </form>
</div>
```

- Go to add-student.component.ts and add the object in class
- Inject HttpClient
- Create onSubmit()

```
import { HttpClient } from '@angular/common/http';
import { Component, inject } from '@angular/core';
import { FormsModule } from '@angular/forms';

@Component({
  selector: 'app-add-student',
  standalone: true,
  imports: [FormsModule],
  templateUrl: './add-student.component.html',
  styleUrl: './add-student.component.css'
})
export class AddStudentComponent {
  studentObj: any = {
    "studentId": 0,
    "studentName": "",
    "studentGrade": "",
    "studentRollNo": "",
    "isActive": true,
    "createdDate": "",
    "modifiedDate": ""
  }
  http = inject(HttpClient);
  onSubmit() {
    debugger;
    this.http.post("https://localhost:7088/api/TblStudents",
this.studentObj).subscribe((res: any) => {
      debugger;
      if (res.studentId >= 0)
        alert("Student Record Created!");
      else {
        alert("Some Problem in Student Creation")
      }
    })
  }
}
```

Run the app and go to AddNew link and fill record and submit as:

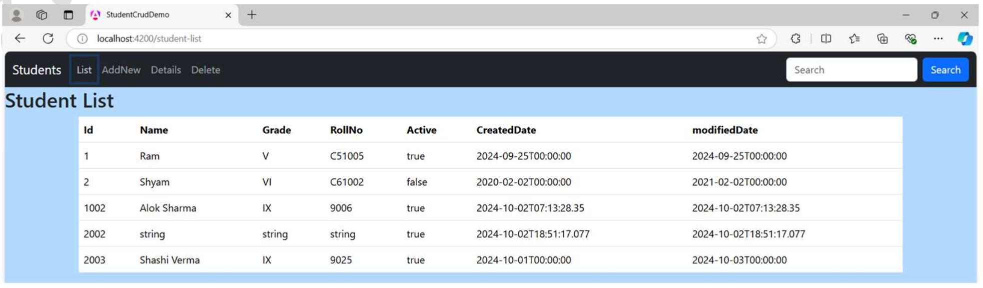


Add New Student

Student Form

Student Name:
Shashi Verma
Student Grade:
IX
Student Roll No:
9025
☑ Is Active
Created Date:
01-10-2024
Modified Date:
03-10-2024
Submit

- Check by clicking student-list



Student List

Id	Name	Grade	RollNo	Active	CreatedDate	modifiedDate
1	Ram	V	C51005	true	2024-09-25T00:00:00	2024-09-25T00:00:00
2	Shyam	VI	C61002	false	2020-02-02T00:00:00	2021-02-02T00:00:00
1002	Alok Sharma	IX	9006	true	2024-10-02T07:13:28.35	2024-10-02T07:13:28.35
2002	string	string	string	true	2024-10-02T18:51:17.077	2024-10-02T18:51:17.077
2003	Shashi Verma	IX	9025	true	2024-10-01T00:00:00	2024-10-03T00:00:00

Add Student

add-student.component.ts

```
import { HttpClient } from '@angular/common/http';
import { Component, inject } from '@angular/core';
import { FormsModule } from '@angular/forms';

@Component({
  selector: 'app-add-student',
  standalone: true,
  imports: [FormsModule],
  templateUrl: './add-student.component.html',
  styleUrl: './add-student.component.css'
})
export class AddStudentComponent {

  studentObj: any = {
    "studentId": 0,
    "studentName": "",
    "studentGrade": "",
    "studentRollNo": "",
    "isActive": true,
    "createdDate": "",
    "modifiedDate": ""
  }
  http = inject(HttpClient);
  onSubmit() {
    debugger;
    this.http.post("https://localhost:7088/api/TblStudents",
this.studentObj).subscribe((res: any) => {
      debugger;
      if (res.studentId >= 0)
        alert("Student Record Created!");
      else {
        alert("Some Problem in Student Creation")
      }
    })
  }

}
```

add-student.component.html

```html
<h2>Add New Student</h2>
<div class="form-container">
  <div class="form-header text-center">
    <h2>Student Form</h2>
  </div>
  <form id="studentForm">
    <!-- <div class="form-group">
      <label for="studentId">Student ID:</label>
      <input
        type="number"
        class="form-control"
        id="studentId"
        name="studentId"
        required
      />
    </div> -->

    <div class="form-group">
      <label for="studentName">Student Name:</label>
      <input
        type="text"
        [(ngModel)]="studentObj.studentName"
        class="form-control"
        id="studentName"
        name="studentName"
        required
      />
    </div>

    <div class="form-group">
      <label for="studentGrade">Student Grade:</label>
      <input
        type="text"
        [(ngModel)]="studentObj.studentGrade"
        class="form-control"
        id="studentGrade"
        name="studentGrade"
        required
      />
    </div>
    <div class="form-group">
      <label for="studentRollNo">Student Roll No:</label>
      <input
        type="text"
        [(ngModel)]="studentObj.studentRollNo"
        class="form-control"
        id="studentRollNo"
        name="studentRollNo"
        required
      />
    </div>

    <div class="form-group form-check">
      <input
        type="checkbox"
        [(ngModel)]="studentObj.isActive"
        class="form-check-input"
        id="isActive"
        name="isActive"
        checked
      />
      <label class="form-check-label" for="isActive">Is
Active</label>
    </div>

    <div class="form-group">
      <label for="createdDate">Created Date:</label>
      <input
        type="date"
        [(ngModel)]="studentObj.createdDate"
        class="form-control"
        id="createdDate"
        name="createdDate"
        required
      />
    </div>

    <div class="form-group">
      <label for="modifiedDate">Modified Date:</label>
      <input
```

```html
        type="date"
        [(ngModel)]="studentObj.modifiedDate"
        class="form-control"
        id="modifiedDate"
        name="modifiedDate"
      />
    </div>

    <button
      type="submit"
      class="btn btn-primary btn-block"
      (click)="onSubmit()"
    >
      Submit
    </button>
  </form>
</div>
```

add-student.component.css

```css
.form-container {
  max-width: 600px;
  margin: 50px auto;
  padding: 20px;
  background-color: #ffffff;
  border-radius: 10px;
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}
.form-header {
  background-color: #007bff;
  color: white;
  padding: 10px;
  border-radius: 10px 10px 0 0;
}
.my-container {
  background-color: red;
}
```

Edit Student

edit-student.component.ts

```
import { Component, inject, OnInit } from '@angular/core';
import { StudentService } from '../../service/student.service';
import { FormsModule } from '@angular/forms';
import { HttpClient } from '@angular/common/http';

@Component({
  selector: 'app-edit-student',
  standalone: true,
  imports: [FormsModule],
  templateUrl: './edit-student.component.html',
  styleUrl: './edit-student.component.css'
})
export class EditStudentComponent implements OnInit {
  studentObj: any = {
    "studentId": 0,
    "studentName": "",
    "studentGrade": "",
    "studentRollNo": "",
    "isActive": true,
    "createdDate": "",
    "modifiedDate": ""
  }

  studentService = inject(StudentService)
  studentList: any[] = [];

  ngOnInit(): void {
    this.loadStudents();
  }
  loadStudents() {
    this.studentService.getStudents().subscribe((res: any) => {
      this.studentList = res;
    })
  }

  onEdit(data: any) {
    debugger;
    this.studentObj = data;
  }
  http = inject(HttpClient);
  onUpdate() {
    debugger;
    this.http.put("https://localhost:7088/api/TblStudents/" +
this.studentObj.studentId, this.studentObj).subscribe((res: any) =>
{
      debugger;
      if (res.result)
        alert("Student Record Created!");
      else {
        alert("Some Problem in Student Updation")
      }
    })
  }
}
```

edit-student.component.html

```
<!-- <h2>Student List</h2>
<div class="container">
  <div class="row">
    <div class="col-12">
      <table class="table table-borderd">
        <thead>
          <tr>
            <th>Id</th>
            <th>Name</th>
            <th>Action</th>
          </tr>
        </thead>
        <tbody>
          @for (item of studentList; track $index) {
          <tr>
            <td>{{ item.studentId }}</td>
            <td>{{ item.studentName }}</td>
            <td>
              <button class="btn btn-primary">Edit</button>
            </td>
          </tr>
          }
        </tbody>
      </table>
    </div>
  </div>
</div> -->
<div class="row pt-2">
  <div class="col-8">
    <div class="card">
      <div class="card-header bg-secondary text-white">Student
List</div>
      <div class="card-body">
        <div class="row">
          <div class="col-12">
            <table class="table table-bordered">
              <thead>
                <tr>
                  <th>ID</th>
                  <th>Name</th>
                  <th>Action</th>
                </tr>
              </thead>
              <tbody>
                @for (item of studentList; track $index) {
                <tr>
                  <td>{{ item.studentId }}</td>
                  <td>{{ item.studentName }}</td>
                  <td>
                    <button class="btn btn-primary"
(click)="onEdit(item)">
                      Edit
                    </button>
                    <!-- <app-my-button
(onBtnClick)="onDelete(item.departmentId)" [btnClass]="'btn btn-
danger'" [btnText]="'Delete'"></app-my-button> -->

                    <!-- <button class="btn btn-danger"
(click)="onDelete(item.departmentId)">Delete</button> -->
                  </td>
                </tr>
                }
              </tbody>
            </table>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!--  <div class="col-4">
    <div class="card">
      <div class="card-header bg-secondary text-white">New
Department</div>
      <div class="card-body">
        <div class="row">
          <div class="col-12">
            <label for="">Department Name</label>
            <input type="text" class="form-control"
placeholder="Enter Name" />
          </div>
          <div class="col-12">
            <label for="">Department Logo</label>
            <input
              type="text"
              class="form-control"
              placeholder="Enter Logo Url"
            />
          </div>
        </div>
        <div class="row pt-3">
          <div class="col-6 text-center">
            <button class="btn btn-secondary">Reset</button>
          </div>
          <div class="col-6 text-center">
            @if(deptObj.departmentId == 0) {
                            <button class="btn btn-success"
(click)="onSave()">Save </button>
                        }@else {
                            <button class="btn btn-warning"
(click)="onUpdate()">Update </button>
                        }
          </div>
        </div>
      </div>
    </div>
  </div> -->
  <div class="col-4">
    <div class="card">
      <div class="card-header bg-secondary text-white">Update
Student</div>
      <div class="card-body">
        <form id="studentForm" formGroup="editStudent">
          <!-- <div class="form-group">
      <label for="studentId">Student ID:</label>
      <input
        type="number"
        class="form-control"
        id="studentId"
        name="studentId"
        required
      />
    </div> -->

          <div class="form-group" id="studentform">
            <label for="studentName">Student Name:</label>
            <input
              type="text"
              [(ngModel)]="studentObj.studentName"
              class="form-control"
              id="studentName"
              name="studentName"
              required
            />
          </div>

          <div class="form-group">
            <label for="studentGrade">Student Grade:</label>
            <input
              type="text"
              [(ngModel)]="studentObj.studentGrade"
              class="form-control"
              id="studentGrade"
              name="studentGrade"
              required
            />
          </div>
          <div class="form-group">
            <label for="studentRollNo">Student Roll No:</label>
            <input
              type="text"
              [(ngModel)]="studentObj.studentRollNo"
              class="form-control"
              id="studentRollNo"
              name="studentRollNo"
              required
            />
          </div>

          <div class="form-group form-check">
            <input
              type="checkbox"
              [(ngModel)]="studentObj.isActive"
              class="form-check-input"
              id="isActive"
              name="isActive"
              checked
            />
            <label class="form-check-label" for="isActive">Is
Active</label>
          </div>

          <div class="form-group">
            <label for="createdDate">Created Date:</label>
            <input
              type="datetime-local"
              [(ngModel)]="studentObj.createdDate"
              class="form-control"
              id="createdDate"
              name="createdDate"
              required
            />
          </div>

          <div class="form-group">
            <label for="modifiedDate">Modified Date:</label>
            <input
              type="datetime-local"
              [(ngModel)]="studentObj.modifiedDate"
              class="form-control"
              id="modifiedDate"
              name="modifiedDate"
            />
          </div>
          <!-- <div class="d-grid gap-2 d-md-flex justify-content-
md-end">
            <button
              type="submit"
              class="btn btn-primary btn-block"
              (click)="onSubmit()"
            >
              Submit
            </button>
          </div> -->
          <div class="row pt-3">
            <div class="col-6 text-center"></div>
            <div class="col-6 text-center">
              @if(studentObj.studentId == 0) {
              <button class="btn btn-warning"
disabled>Update</button>
              }@else {
              <button class="btn btn-warning" (click)="onUpdate()">
                Update
              </button>
              }
            </div>
          </div>
        </form>
      </div>
    </div>
  </div>
</div>
```

edit-student.component.css

```
.form-container {
  max-width: 600px;
  margin: 50px auto;
  padding: 20px;
  background-color: #ffffff;
  border-radius: 10px;
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}
.form-header {
  background-color: #007bff;
  color: white;
  padding: 10px;
  border-radius: 10px 10px 0 0;
}
.my-container {
  background-color: red;
}
```

Delete A Student

delete-student.component.ts

```
import { HttpClient } from '@angular/common/http';
import { Component, inject } from '@angular/core';
import { StudentService } from '../../service/student.service';
import { FormsModule } from '@angular/forms';

@Component({
  selector: 'app-delete-student',
  standalone: true,
  imports: [FormsModule],
  templateUrl: './delete-student.component.html',
  styleUrl: './delete-student.component.css'
})
export class DeleteStudentComponent {
  studentObj: any = {
    "studentId": 0,
    "studentName": "",
    "studentGrade": "",
    "studentRollNo": "",
    "isActive": true,
    "createdDate": "",
    "modifiedDate": ""
  }
  studentService = inject(StudentService)
  studentList: any[] = [];

  ngOnInit(): void {
    this.loadStudents();
  }
  loadStudents() {
    this.studentService.getStudents().subscribe((res: any) => {
      this.studentList = res;
    })
  }

  onDelete(data: any) {
    debugger;
    this.studentObj = data;
  }
  http = inject(HttpClient);
  onConfirm() {
    const isDelete = confirm("Are you sure?");
    if (isDelete) {
      debugger;
      this.http.delete("https://localhost:7088/api/TblStudents/" +
this.studentObj.studentId).subscribe((res: any) => {
        debugger;
        if (res.result)
          alert("Student Record Deleted!");
        else {
          alert("Some Problem in Student Deletion")
        }
      })
    }
  }
}
```

delete-student.component.html

```
<div class="row pt-2">
  <div class="col-8">
    <div class="card">
      <div class="card-header bg-secondary text-white">Student
List</div>
      <div class="card-body">
```

```
        <div class="row">
          <div class="col-12">
            <table class="table table-bordered">
              <thead>
                <tr>
                  <th>ID</th>
                  <th>Name</th>
                  <th>Action</th>
                </tr>
              </thead>
              <tbody>
                @for (item of studentList; track $index) {
                <tr>
                  <td>{{ item.studentId }}</td>
                  <td>{{ item.studentName }}</td>
                  <td>
                    <button class="btn btn-danger"
(click)="onDelete(item)">
                      Delete
                    </button>
                    <!-- <app-my-button
(onBtnClick)="onDelete(item.departmentId)" [btnClass]="'btn btn-
danger'" [btnText]="'Delete'"></app-my-button> -->

                    <!-- <button class="btn btn-danger"
(click)="onDelete(item.departmentId)">Delete</button> -->
                  </td>
                </tr>
                }
              </tbody>
            </table>
          </div>
        </div>
      </div>
    </div>
  </div>

  <div class="col-4">
    <div class="card">
      <div class="card-header bg-secondary text-white">Delete
Student</div>
```

```
      <div class="card-body">
        <form id="studentForm" formGroup="editStudent">
          <div class="form-group" id="studentform">
            <label for="studentName">Student Name:</label>
            <input
              type="text"
              [(ngModel)]="studentObj.studentName"
              class="form-control"
              id="studentName"
              name="studentName"
              required
            />
          </div>

          <div class="form-group">
            <label for="studentGrade">Student Grade:</label>
            <input
              type="text"
              [(ngModel)]="studentObj.studentGrade"
              class="form-control"
              id="studentGrade"
              name="studentGrade"
              required
            />
          </div>

          <div class="form-group">
            <label for="studentRollNo">Student Roll No:</label>
            <input
              type="text"
              [(ngModel)]="studentObj.studentRollNo"
              class="form-control"
              id="studentRollNo"
              name="studentRollNo"
              required
            />
          </div>

          <div class="form-group form-check">
            <input
              type="checkbox"
              [(ngModel)]="studentObj.isActive"
              class="form-check-input"
              id="isActive"
              name="isActive"
              checked
            />
            <label class="form-check-label" for="isActive">Is
Active</label>
          </div>

          <div class="form-group">
            <label for="createdDate">Created Date:</label>
            <input
              type="datetime-local"
              [(ngModel)]="studentObj.createdDate"
              class="form-control"
              id="createdDate"
              name="createdDate"
              required
            />
          </div>

          <div class="form-group">
            <label for="modifiedDate">Modified Date:</label>
            <input
              type="datetime-local"
              [(ngModel)]="studentObj.modifiedDate"
              class="form-control"
              id="modifiedDate"
              name="modifiedDate"
            />
          </div>

          <div class="row pt-3">
            <div class="col-6 text-center"></div>
            <div class="col-6 text-center">
              @if(studentObj.studentId == 0) {
              <button class="btn btn-warning"
disabled>Confirm</button>
              }@else {
              <button class="btn btn-success" (click)="onConfirm()">
```

```
                Confirm
              </button>
              }
            </div>
          </div>
        </form>
      </div>
    </div>
  </div>
</div>
```

☸✠End of Chapter✠☸