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Roll : Ce001

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Lab : 08

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## **Web Api Code**

### **=> Student.cs ( Model Code)**

```
using System.Diagnostics.CodeAnalysis;
```

```
namespace Web_Api_NetCore.Models
{
    public class Student
    {
        public int Id { get; set; }

        public string FirstName { get; set; }

        public string LastName { get; set; }

        public string Email { get; set; }

    }
}
```

### **=> StudentController.cs (Controller Code)**

```
using Microsoft.AspNetCore.Http;
using Microsoft.AspNetCore.Mvc;
```

```
using Web_Api_NetCore.Models;
```

```
namespace Web_Api_NetCore.Controllers
```

```
{  
    [Route("api/[controller]")]  
    [ApiController]  
    public class StudentsController : ControllerBase  
    {  
        private List<Student> _students = new List<Student>  
        {  
            new Student{Id =  
1,FirstName="Nisarg",LastName="Amlani",Email="amlaninisarg15@gmail.com"},  
            new Student{Id =  
2,FirstName="Vaibhav",LastName="Dhanani",Email="vaibhavdhanani@gmail.co  
m"},  
            new Student{Id =  
3,FirstName="Rich",LastName="Amrutiya",Email="richamrutiya@gmail.com"},  
            new Student{Id =  
4,FirstName="Mahek",LastName="Garala",Email="mahekgarala@gmail.com"}  
        };  
  
        [HttpGet]  
        public ActionResult<IEnumerable<Student>> GetStudents()  
        {  
            return _students;  
        }  
  
        [HttpGet("{id}")]  
        public ActionResult<Student> GetStudent(int id)  
        {  
            Student stud = _students.FirstOrDefault(student => student.Id == id);  
            if(stud == null)  
                return NotFound();  
            return stud;  
        }  
  
        [HttpPost]
```

```

public ActionResult<Student> AddStudent(Student student)
{
    _students.Add(student);
    return GetStudent(student.Id);

}

[HttpPut]
public ActionResult<Student> UpdateStudent(int id , Student student)
{
    Student toupdate = _students.FirstOrDefault(stud => stud.Id == id);
    if(toupdate == null) return NotFound();

    toupdate.FirstName = student.FirstName;
    toupdate.LastName = student.LastName;
    toupdate.Email = student.Email;
    _students.Add(toupdate);

    return GetStudent(toupdate.Id);
}

[HttpDelete("{id}")]
public ActionResult DeleteStudent(int id)
{
    Student toDelete = _students.FirstOrDefault(s => s.Id == id);
    if(toDelete == null) return NotFound();

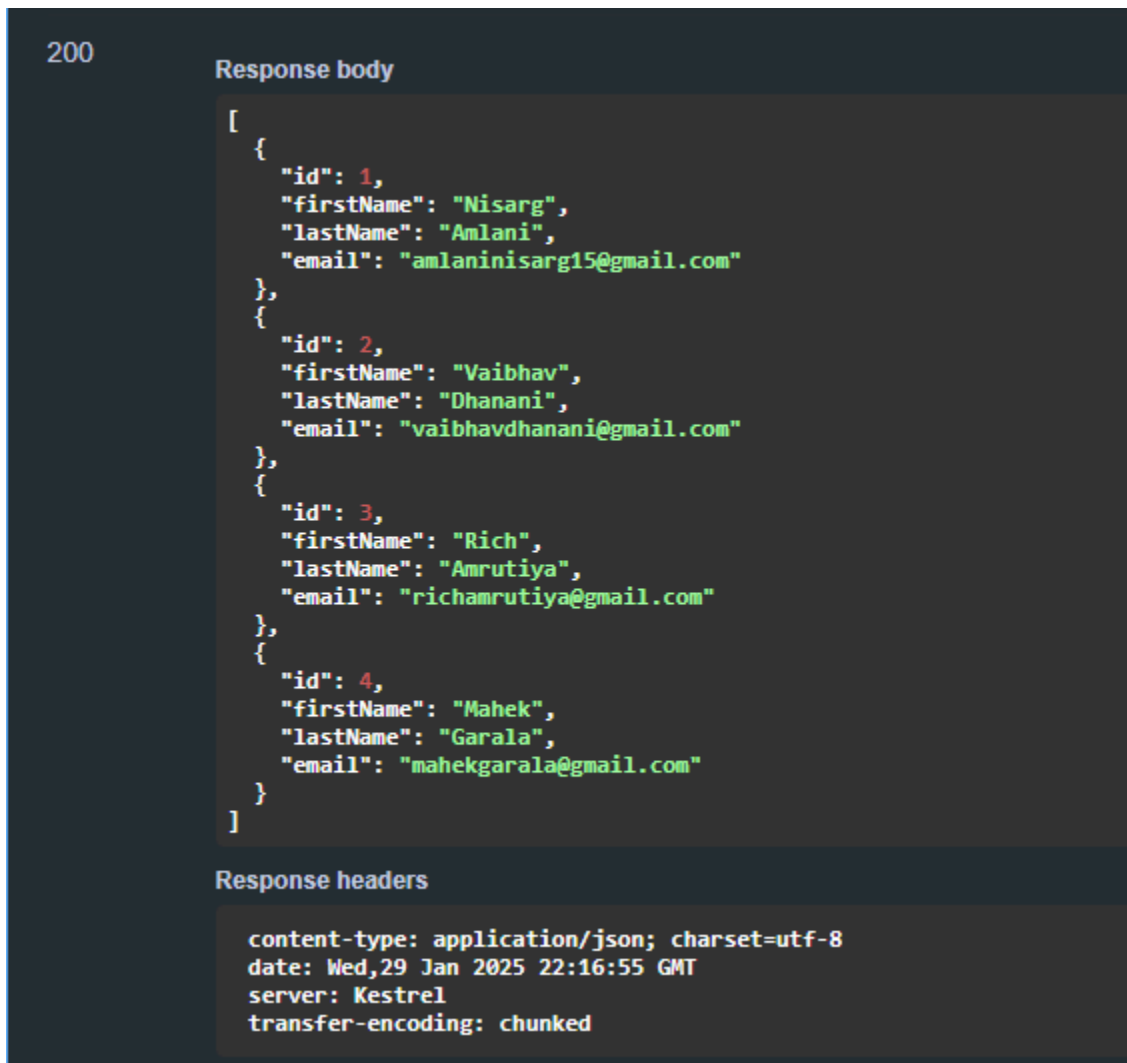
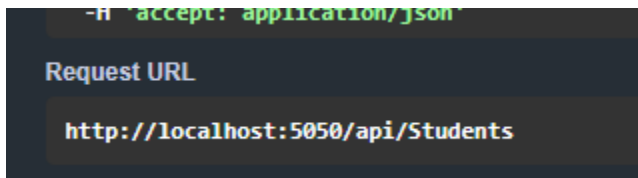
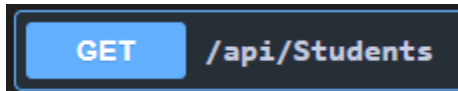
    _students.Remove(toDelete);
    return NoContent();
}

}

```

## Output

### => Get All Students



## => Get Student by id

GET /api/Students/{id}

### Request URL

http://localhost:5050/api/Students/1

### Server response

#### Code

#### Details

200

#### Response body

```
{
  "id": 1,
  "firstName": "Nisarg",
  "lastName": "Amlani",
  "email": "amlaninisarg15@gmail.com"
}
```

#### Response headers

```
content-type: application/json; charset=utf-8
date: Wed, 29 Jan 2025 22:20:23 GMT
server: Kestrel
transfer-encoding: chunked
```

### Responses

## => Add Student

POST

/api/Students

Request body

```
{
  "id": 5,
  "firstName": "Nisarg",
  "lastName": "Amlani",
  "email": "22ceueg082"
}
```

Request URL

http://localhost:5050/api/Students

Server response

Code

Details

201

Undocumented

Response body

```
{
  "id": 5,
  "firstName": "Nisarg",
  "lastName": "Amlani",
  "email": "22ceueg082"
}
```

Response headers

```
content-type: application/json; charset=utf-8
date: Wed, 29 Jan 2025 22:24:49 GMT
location: http://localhost:5050/api/Students/5
server: Kestrel
transfer-encoding: chunked
```

## => Update Student

PUT	/api/Students
-----	---------------

Name	Description
id	<input type="text" value="2"/>
integer(\$int32)	
(query)	

Request body

```
{
  "id": 1,
  "firstName": "Nisarg",
  "lastName": "Amlani",
  "email": "amlaninisarg07@gmail.com"
}
```

Server response

Code	Details
200	<p>Response body</p> <pre>{   "id": 2,   "firstName": "Nisarg",   "lastName": "Amlani",   "email": "amlaninisarg07@gmail.com" }</pre> <p>Response headers</p> <pre>content-type: application/json; charset=utf-8 date: Wed, 29 Jan 2025 22:26:35 GMT server: Kestrel transfer-encoding: chunked</pre>

## => Delete the Student

**DELETE** /api/Students/{id}

Name	Description
------	-------------

**id** \* required

integer(\$int32)

(path)

### Request URL

http://localhost:5050/api/Students/1

### Server response

Code	Details
------	---------

204

Undocumented

### Response headers

date: Wed, 29 Jan 2025 22:29:19 GMT  
server: Kestrel