

# Student Solidity

```
// SPDX-License-Identifier: MIT
```

```
pragma solidity ^0.8.0;
```

```
contract StudentRegistry {
```

```
    // Structure to hold student data
```

```
    struct Student {
```

```
        uint id;
```

```
        string name;
```

```
        uint age;
```

```
        string course;
```

```
    }
```

```
    // Array to hold the list of students
```

```
    Student[] public students;
```

```
    // Mapping to track the number of students
```

```
    uint public studentCount;
```

```
    // Fallback function to handle calls with data or unrecognized functions
```

```
    fallback() external payable {
```

```
        // This function can be used to handle unexpected calls
```

```
    }
```

```
    // Receive function to handle plain Ether transfers
```

```
    receive() external payable {
```

```
        // This function can be used to accept donations or track incoming Ether
```

```
    }
```

```
    // Function to add a new student
```

```
    function addStudent(string memory _name, uint _age, string memory _course) public {
```

```
    studentCount++;  
    students.push(Student(studentCount, _name, _age, _course));  
}
```

```
// Function to retrieve a student by ID
```

```
function getStudent(uint _id) public view returns (uint, string memory, uint, string memory) {  
    require(_id > 0 && _id <= studentCount, "Student not found.");  
    Student memory student = students[_id - 1]; // Arrays are 0-indexed  
    return (student.id, student.name, student.age, student.course);  
}
```

```
// Function to get the total number of students
```

```
function getTotalStudents() public view returns (uint) {  
    return studentCount;  
}  
}
```