## http://localhost:2025/students/save

```
{
  "name": "Shekhar",
  "address": {
    "city": "Chennai",
    "state": "TN",
    "zip": "60001"
  },
  "enrollments": [
      { "courseld": 1 },
      { "courseld": 2 },
      { "courseld": 3 }
  ]
}
```

#### This JSON means:

- Student name is **Shekhar**.
- He lives in Chennai, TN, 60001.
- He is enrolling in **three courses** with ID

### http://localhost:2025/courses/save

```
{
   "name": "Chemistry",
   "description": "Organic and inorganic chemistry basics"
}
```

ER diagram represents a simple **Student Enrollment System**. Here's a breakdown of each table and the relationships between them:

#### 1. student

- Fields:
  - id (Primary Key)
  - name (Name of the student)
  - address\_id (Foreign Key → address.id)
- Associations:
  - One-to-One with address (a student has one address)
  - One-to-Many with enrollment (a student can enroll in multiple courses)

#### 2. address

- Fields:
  - id (Primary Key)
  - city
  - state

- zip
- Associations:
  - One-to-One from student (each student has one address)

#### 3. course

- Fields:
  - id (Primary Key)
  - title (Course name)
  - description
- Associations:
  - One-to-Many with enrollment (a course can have many students enrolled)

#### 4. enrollment

- Fields:
  - id (Primary Key)
  - enrollment\_date (When the student enrolled)
  - course\_id (Foreign Key → course.id)
  - student\_id (Foreign Key → student.id)
- Associations:
  - Many-to-One to student (many enrollments for a student)
  - Many-to-One to course (many students per course)

### **Association Summary**

Entity A	Relationship	Entity B	Cardinality
student	→ address	1-to-1	Each student has 1 address
student	$\rightarrow$	1-to-many	Each student can enroll in many

	enrollment		courses
course	→ enrollment	1-to-many	Each course can be taken by many students
enrollment	links	student + course	Acts as join table

# **Conceptual View**

- A Student has an Address.
- A **Student** can **Enroll** in many **Courses**.
- Each **Enrollment** keeps track of which student enrolled in which course and when.
- The **Enrollment** table is a **bridge/join table** between student and course.