Name:- Tanishq. Dhokariya

Technology:- DJANGO, HTML

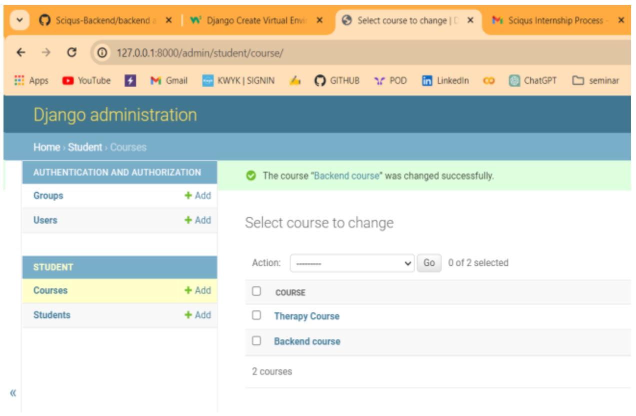
BACKEND

- **Add Course Entity:**

```python
from django.db import models

class Course(models.Model):
    course_id = models.AutoField(primary_key=True)
    course_name = models.CharField(max_length=100)
    course_code = models.CharField(max_length=20, unique=True)
    course_duration = models.IntegerField()

    def __str__(self):
        return f"{self.course_name}"

class Student(models.Model):
    student_id = models.AutoField(primary_key=True)
    name = models.CharField(max_length=100)
    # Add other student fields
    course = models.ForeignKey(Course, on_delete=models.CASCADE)

    def __str__(self):
        return f"{self.name}"
```

http://127.0.0.1:8000/admin/

Course:


Sciqus-Backend/backend
Django Create Virtual Envi
Select course to change | D
Sciqus Internship Process
127.0.0.1:8000/admin/student/course/
Apps
YouTube
Gmail
KWYK | SIGNIN
GITHUB
POD
LinkedIn
ChatGPT
seminar

Django administration

Home › Student › Courses

AUTHENTICATION AND AUTHORIZATION
Groups + Add
Users + Add

STUDENT
Courses + Add
Students + Add

The course "Backend course" was changed successfully.

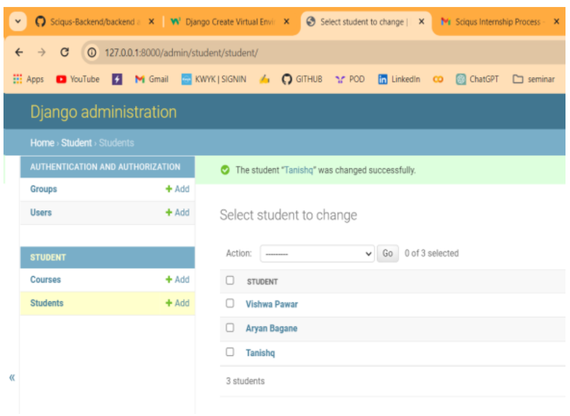
Select course to change

Action: --------- Go 0 of 2 selected

COURSE
Therapy Course
Backend course

2 courses

Students:


Sciqus-Backend/backend
Django Create Virtual Envi
Select student to change |
Sciqus Internship Process
127.0.0.1:8000/admin/student/student/
Apps
YouTube
Gmail
KWYK | SIGNIN
GITHUB
POD
LinkedIn
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seminar

Django administration

Home › Student › Students

AUTHENTICATION AND AUTHORIZATION
Groups + Add
Users + Add

STUDENT
Courses + Add
Students + Add

The student "Tanishq" was changed successfully.

Select student to change

Action: --------- Go 0 of 3 selected

STUDENT
Vishwa Pawar
Aryan Bagane
Tanishq

3 students

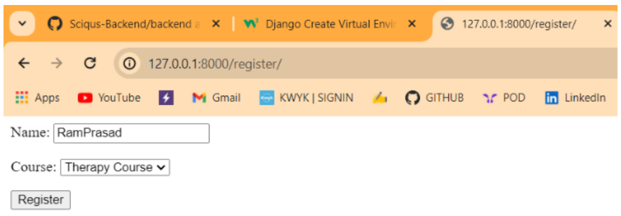
- **Enhance Student Registration:**

```
def register_student(request):
    if request.method == 'POST':
        form = StudentRegistrationForm(request.POST)
        if form.is_valid():
            form.save()
            return redirect('success_page')  # Redirect to a success page or
any other page
    else:
        form = StudentRegistrationForm()

    return render(request, 'student/registration_template.html', {'form':
form})
```

Form

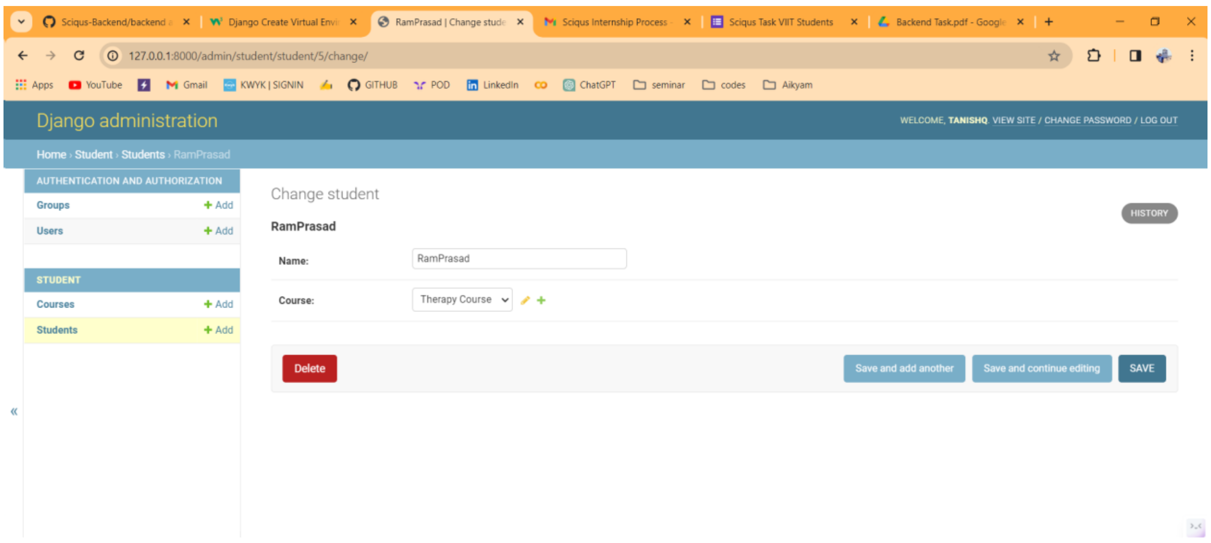
```
<form method="post" action="{% url 'register_student' %}">
    {% csrf_token %}
    {{ form.as_p }}
    <button type="submit">Register</button>
  </form>
```

http://127.0.0.1:8000/register/


127.0.0.1:8000/register/

Name: RamPrasad

Course: Therapy Course


127.0.0.1:8000/admin/student/student/5/change/

Django administration

WELCOME, TANISHQ. VIEW SITE / CHANGE PASSWORD / LOG OUT

Home › Student › Students › RamPrasad

Change student

RamPrasad

Name: RamPrasad

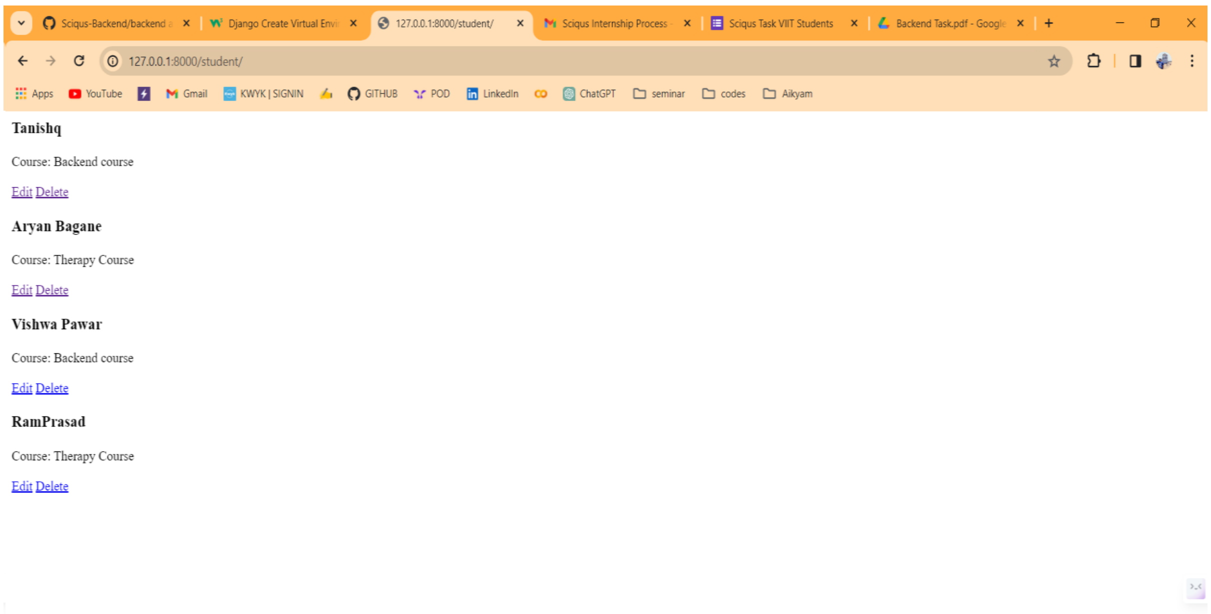
Course: Therapy Course

- **Show Student Details with Course Information:**

```python
from .models import Student

def student_list(request):
    students = Student.objects.select_related('course').all()
    # Use select_related to fetch related course information in a single query

    context = {'students': students}
    return render(request, 'student/student_list.html', context)
```

```html
{% for student in students %}
  <div>
    <h3>{{ student.name }}</h3>
    <p>Course: {{ student.course.course_name }}</p>

    <!-- Edit Button -->
    <a href="{% url 'edit_student' student.pk %}">Edit</a>

    <!-- Delete Button -->
    <a href="{% url 'delete_student' student.pk %}">Delete</a>
  </div>
{% endfor %}
```

http://127.0.0.1:8000/student/



Tanishq

Course: Backend course

Edit Delete

Aryan Bagane

Course: Therapy Course

Edit Delete

Vishwa Pawar

Course: Backend course

Edit Delete

RamPrasad

Course: Therapy Course

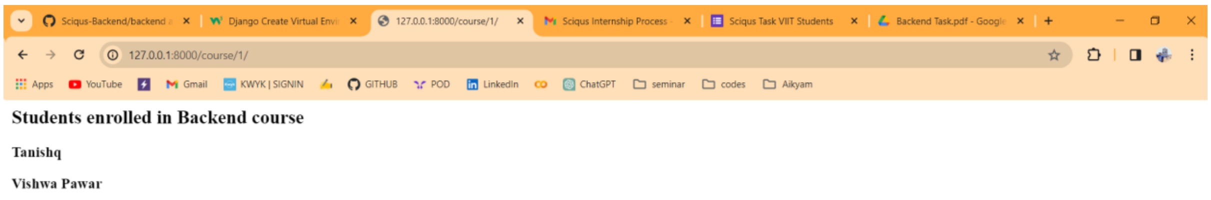
Edit Delete

- **Show all Students Details Enroll in the Course:**

```python
from .models import Student, Course

def students_in_course(request, course_id):
    course = get_object_or_404(Course, pk=course_id)
    students = Student.objects.filter(course=course)

    context = {'course': course, 'students': students}
    return render(request, 'student/students_in_course.html', context)
```

```html
<h2>Students enrolled in {{ course.course_name }}</h2>

{% for student in students %}
  <div>
    <h3>{{ student.name }}</h3>
    <!-- Add other student information as needed -->
  </div>
{% endfor %}
```

http://127.0.0.1:8000/course/1/



Students enrolled in Backend course

Tanishq

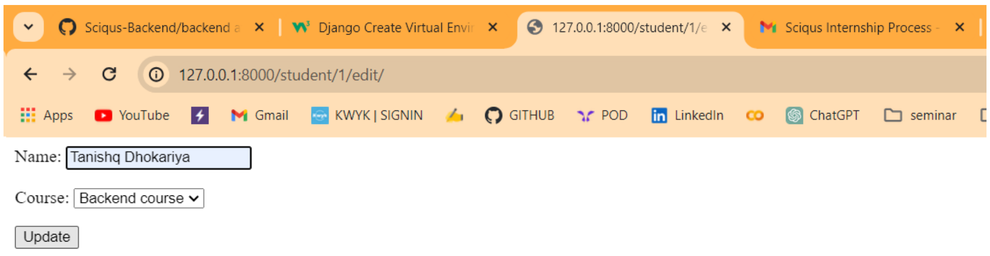
Vishwa Pawar

- **Edit Student Details with Course Modification:**

```python
def edit_student(request, student_id):
    student = get_object_or_404(Student, pk=student_id)

    if request.method == 'POST':
        form = StudentUpdateForm(request.POST, instance=student)
        if form.is_valid():
            form.save()
            return redirect('student_list')
    else:
        form = StudentUpdateForm(instance=student)

    return render(request, 'student/edit_student.html', {'form': form,
'student': student})
```

```
<form method="post" action="">
    {% csrf_token %}
    {{ form.as_p }}
    <button type="submit">Update</button>
  </form>
```

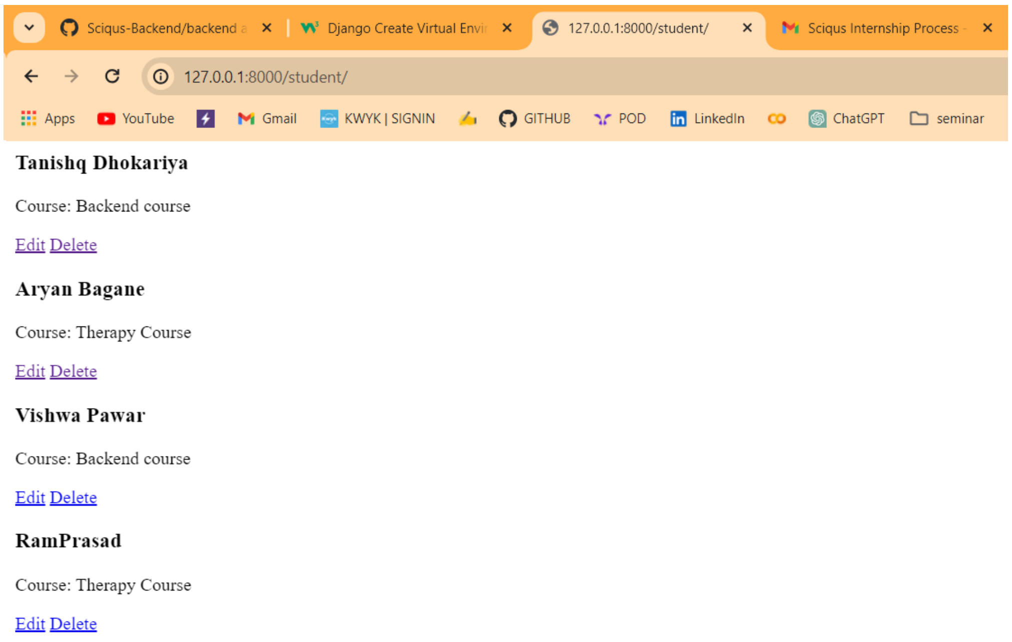
http://127.0.0.1:8000/student/1/edit/


Sciqus-Backend/backend
Django Create Virtual Envi
127.0.0.1:8000/student/1/e
Sciqus Internship Process
127.0.0.1:8000/student/1/edit/
Apps
YouTube
Gmail
KWYK | SIGNIN
GITHUB
POD
LinkedIn
ChatGPT
seminar

Name: Tanishq Dhokariya

Course: Backend course

Update



Tanishq Dhokariya

Course: Backend course

Edit Delete

Aryan Bagane

Course: Therapy Course

Edit Delete

Vishwa Pawar

Course: Backend course

Edit Delete

RamPrasad

Course: Therapy Course

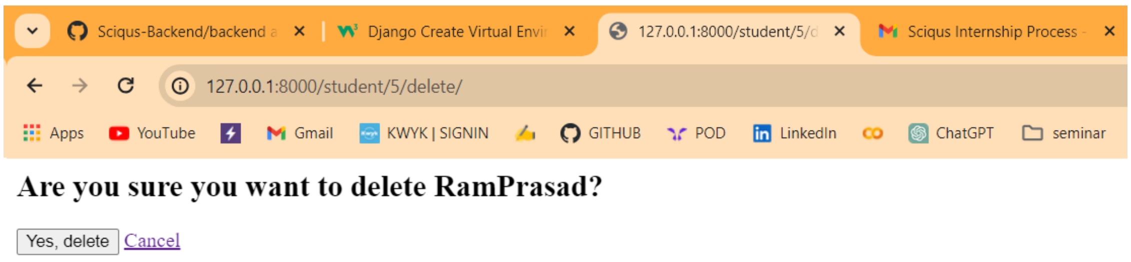
Edit Delete

- **Delete Students with Course Deletion:**

```
def delete_student(request, student_id):
    student = get_object_or_404(Student, pk=student_id)

    if request.method == 'POST':
        # Delete the student
        student.delete()
        # Redirect to the list of students or any other page
        return redirect('student_list')

    return render(request, 'student/delete_student.html', {'student':
student})
```

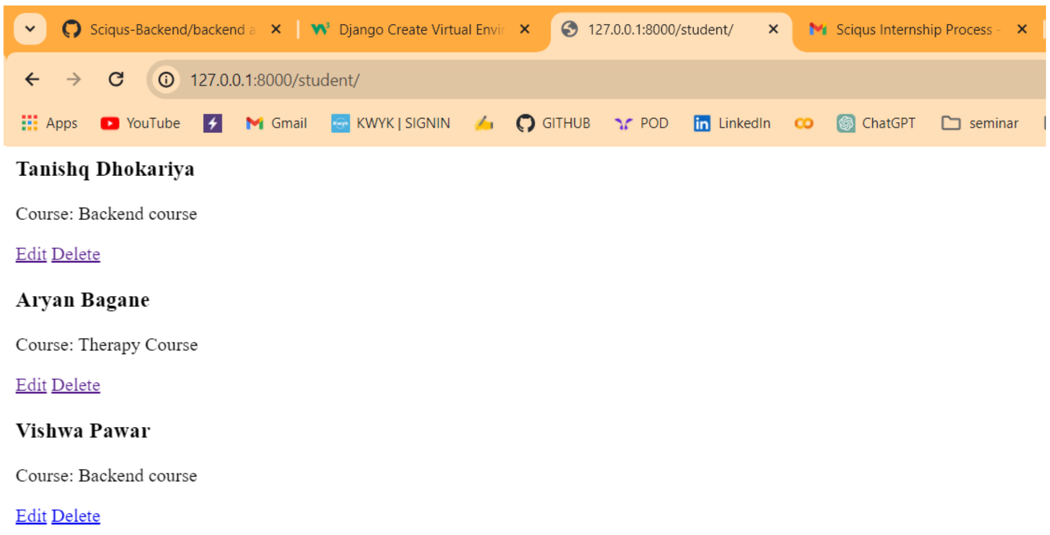
```
<h2>Are you sure you want to delete {{ student.name }}?</h2>

<form method="post" action="">
  {% csrf_token %}
  <button type="submit">Yes, delete</button>
  <a href="{% url 'student_list' %}">Cancel</a>
</form>
```

http://127.0.0.1:8000/student/5/delete/


Sciqus-Backend/backend
Django Create Virtual Envi
127.0.0.1:8000/student/5/d
Sciqus Internship Process
127.0.0.1:8000/student/5/delete/
Apps
YouTube
Gmail
KWYK | SIGNIN
GITHUB
POD
LinkedIn
ChatGPT
seminar

Are you sure you want to delete RamPrasad?

Yes, delete Cancel



Tanishq Dhokariya

Course: Backend course

Edit Delete

Aryan Bagane

Course: Therapy Course

Edit Delete

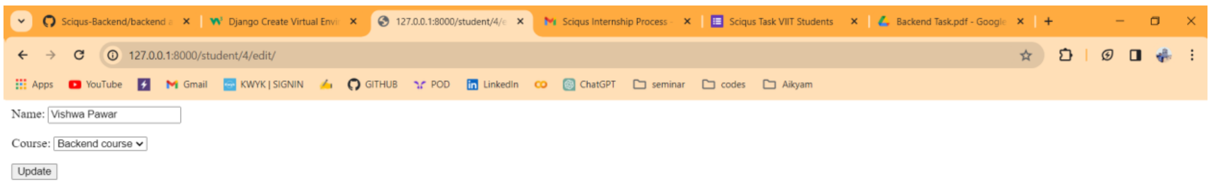
Vishwa Pawar

Course: Backend course

Edit Delete

- **Include Transaction Management:**

```
@transaction.atomic


def edit_student(request, student_id):
    student = get_object_or_404(Student, pk=student_id)

    if request.method == 'POST':
        form = StudentUpdateForm(request.POST, instance=student)
        if form.is_valid():
            form.save()
            return redirect('student_list')
    else:
        form = StudentUpdateForm(instance=student)

    return render(request, 'student/edit_student.html', {'form': form,
'student': student})
```


Sciqus-Backend/backend
Django Create Virtual Env
127.0.0.1:8000/student/4/
Sciqus Internship Process
Sciqus Task VIIT Students
Backend Task.pdf - Google
127.0.0.1:8000/student/4/edit/
Apps
YouTube
Gmail
KWYK | SIGNIN
GITHUB
POD
LinkedIn
ChatGPT
seminar
codes
Aikyam
Update

Name: Vishwa Pawar

Course: Backend course