Experiment-10

For students enrolment developed in Module 2, create a generic class view which displays list of students and detail view that displays student details for any selected student in the list.

Step-1: First, let's create models for Student and Course if you haven't already:

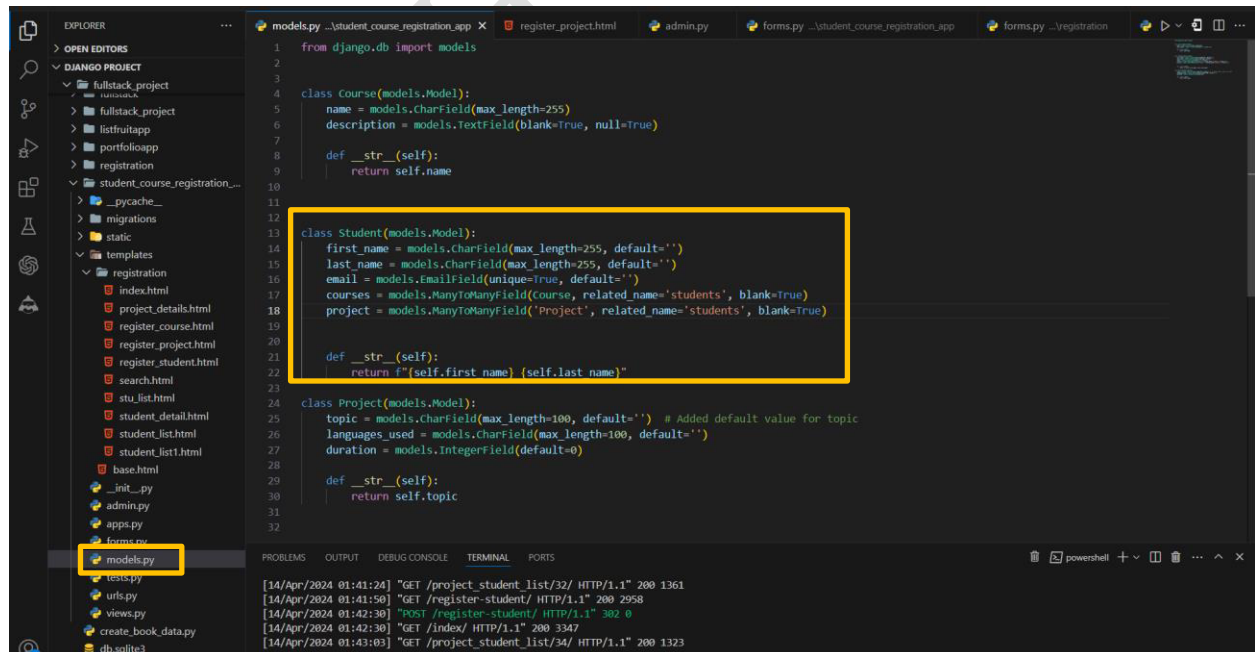**Models.py**

```python
class Student(models.Model):
    first_name = models.CharField(max_length=255, default='')
    last_name = models.CharField(max_length=255, default='')
    email = models.EmailField(unique=True, default='')
    courses = models.ManyToManyField(Course, related_name='students', blank=True)
    project = models.ManyToManyField('Project', related_name='students', blank=True)
```

Step-2: Next, create views for the list and detail views and import necessary packages:

```python
from django.views.generic import ListView, DetailView

class StudentListView(ListView):

    model = Student

    template_name = 'registration/stu_list.html'

    context_object_name = 'students'

class StudentDetailView(DetailView):

    model = Student

    template_name = 'registration/student_detail.html'

    context_object_name = 'student'
```
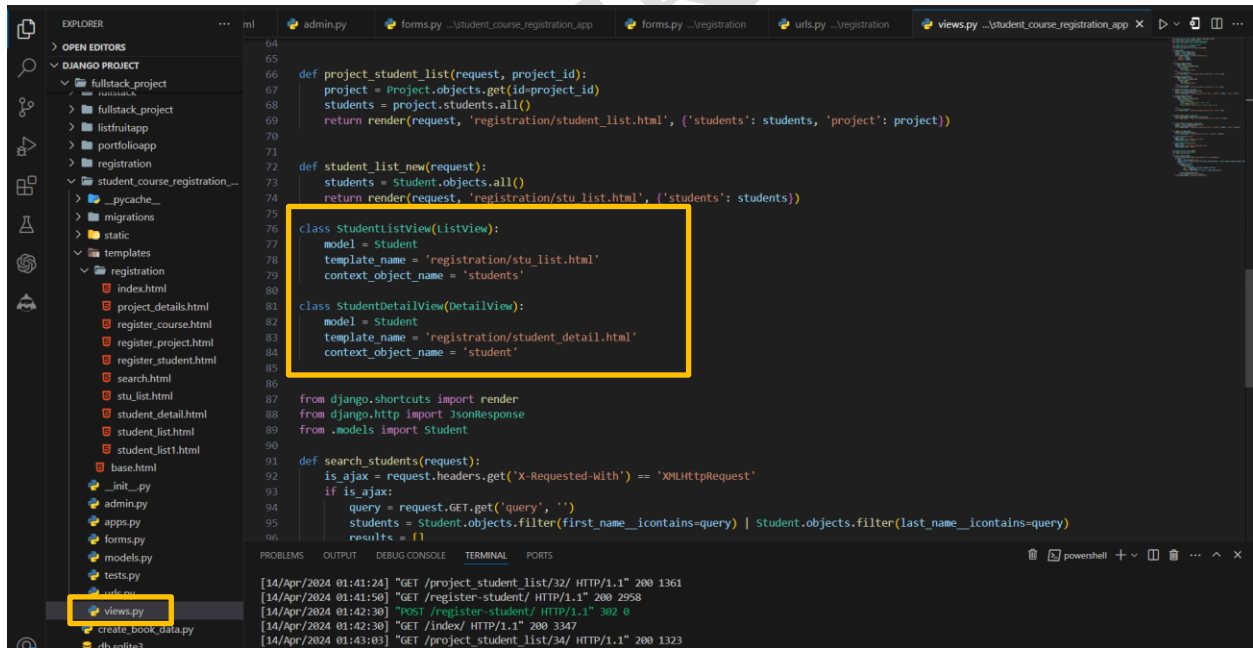

- In the StudentListView, we've overridden the get_queryset method to filter the students based on the course_id parameter in the URL. If the course_id is

provided, it will return the students associated with that course; otherwise, it will return all students.

Step-3: Now, let's create the templates:

stu_list.html

```
{% extends 'base.html' %}

{% block content %}

 <h1>Students</h1>

 <ul>

   {% for student in students %}

    <li>

     <a href="{% url 'student_detail' student.pk %}">{{ student.first_name }} {{ student.last_name }}</a>

    </li>

   {% endfor %}

 </ul>

{% endblock %}
```
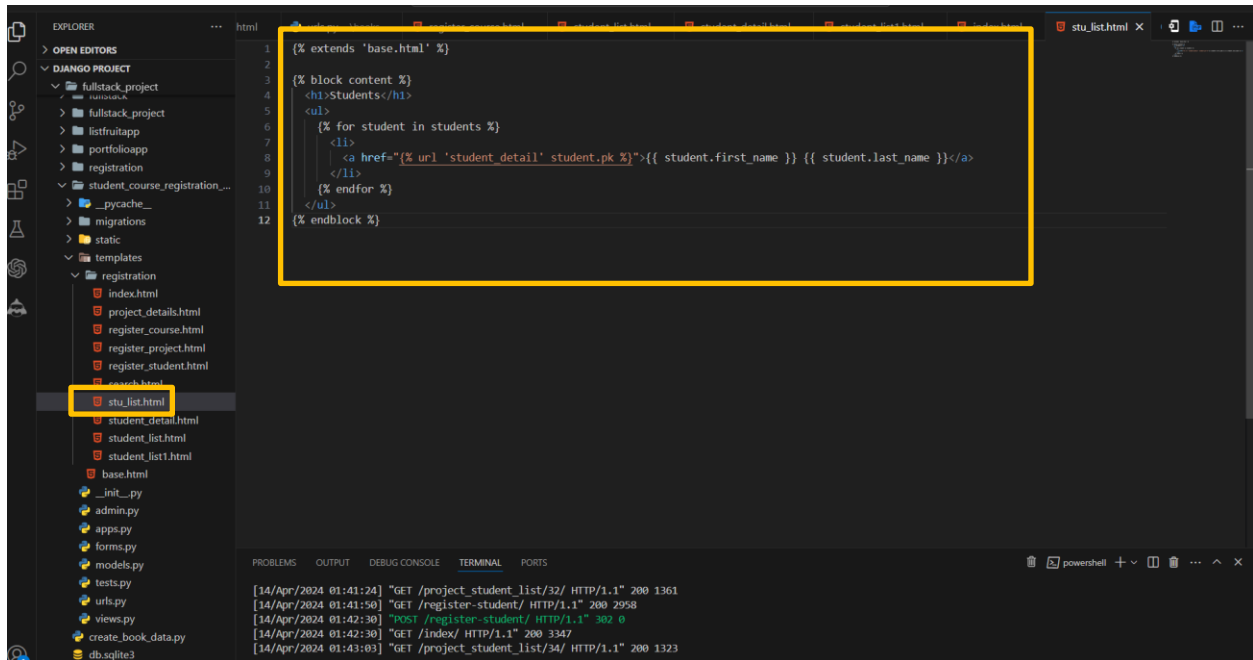
student_detail.html

```
{% extends 'base.html' %}

{% block content %}

 <div class="container my-5">

   <div class="row">

    <div class="col-md-6 offset-md-3">

     <div class="card">

     <div class="card-body">

      <h1 class="card-title"> Name: {{ student.first_name }} {{ student.last_name }}</h1>

       <h1 class="card-title">Email: {{ student.email }}</h1>

      </div>

     </div>
```
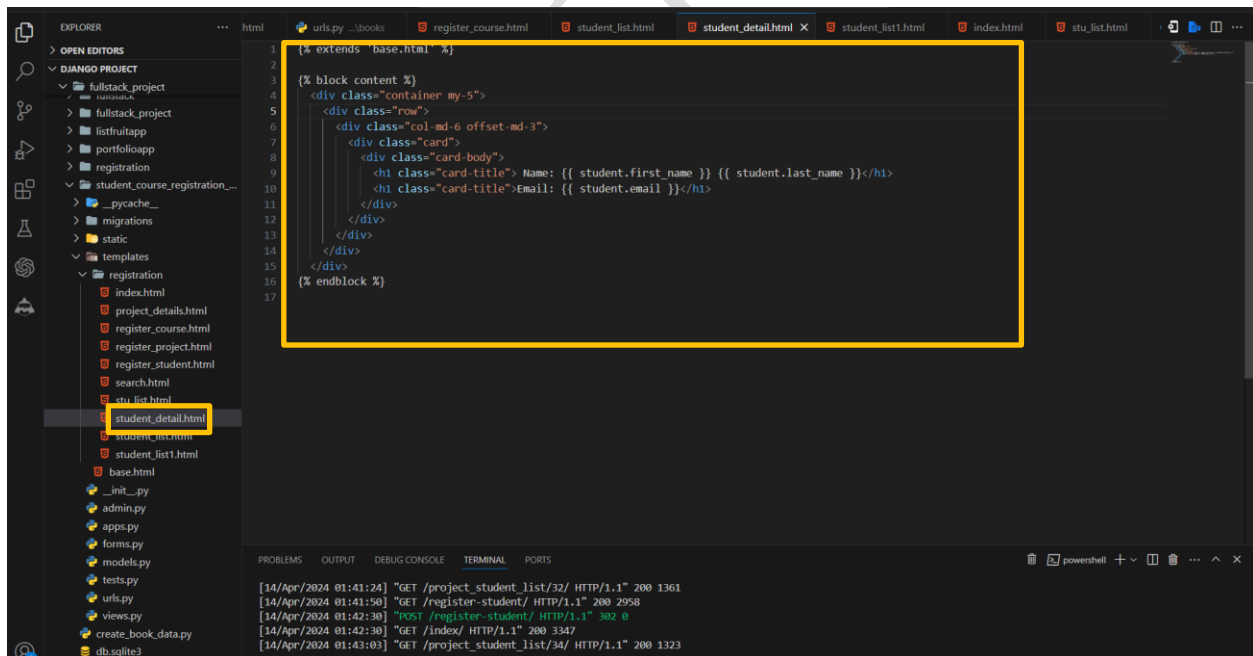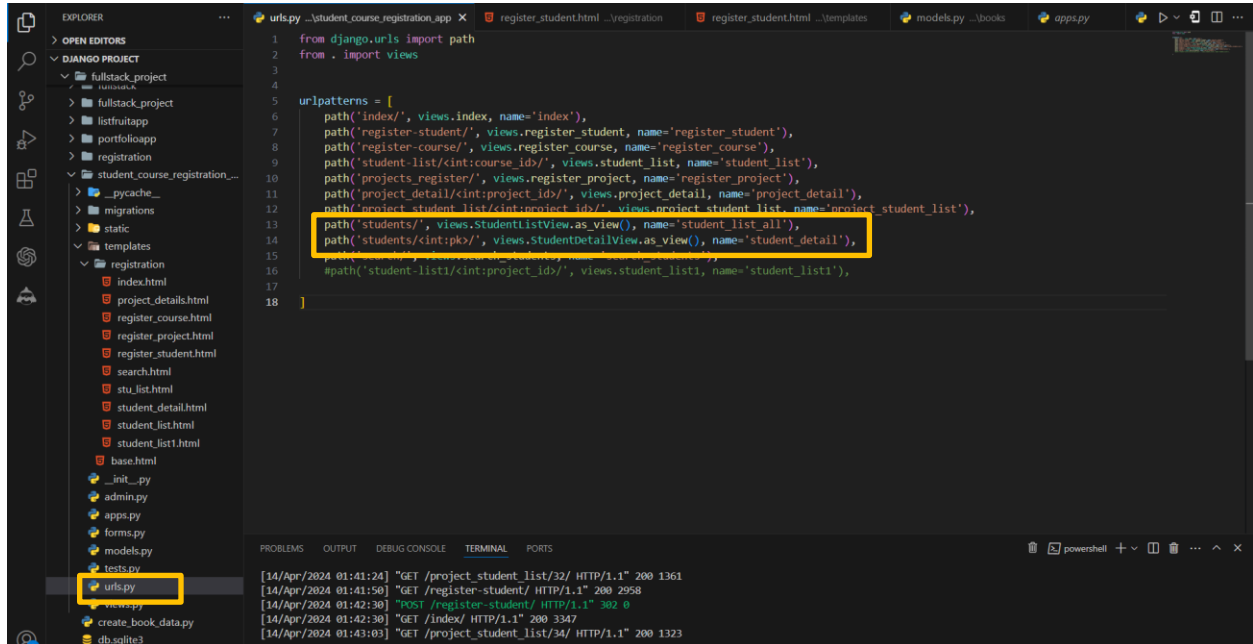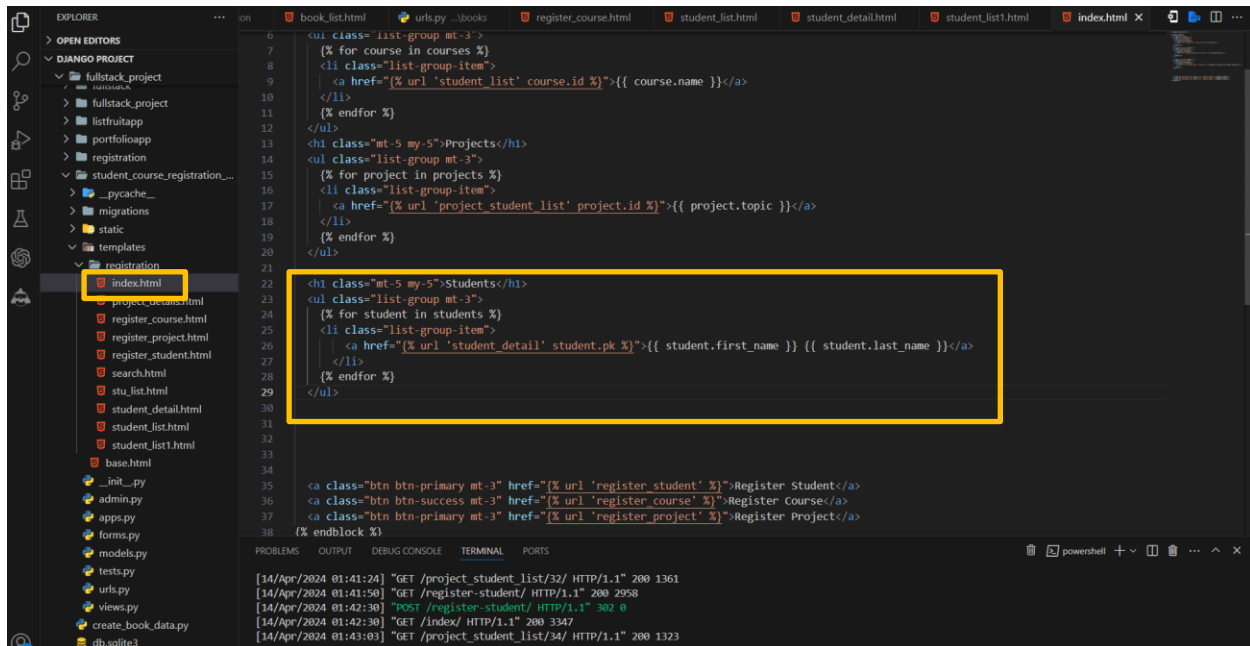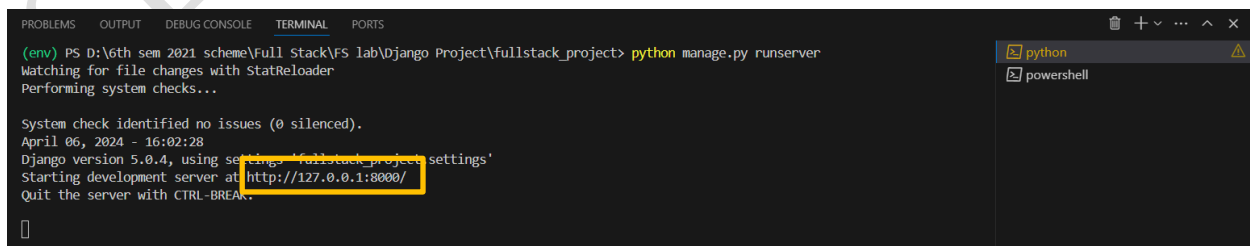
```
        </div>

      </div>

    </div>

{% endblock %}
```

Step-4: add the URL patterns:

path('students/', views.StudentListView.as_view(), name='student_list_all'),

path('students/<int:pk>/', views.StudentDetailView.as_view(), name='student_detail'),

Step-5: add Index.html For showing the Students In Main Page:

Index.html

```
<h1 class="mt-5 my-5">Students</h1>

<ul class="list-group mt-3">

  {% for student in students %}

  <li class="list-group-item">

    <a href="{% url 'student_detail' student.pk %}">{{ student.first_name }} {{ student.last_name }}</a>

  </li>

  {% endfor %}
```


Step-6: Run the development server

- In the VS Code terminal, navigate to your Django project's directory (the one containing manage.py).

- Run the development server

python manage.py runserver
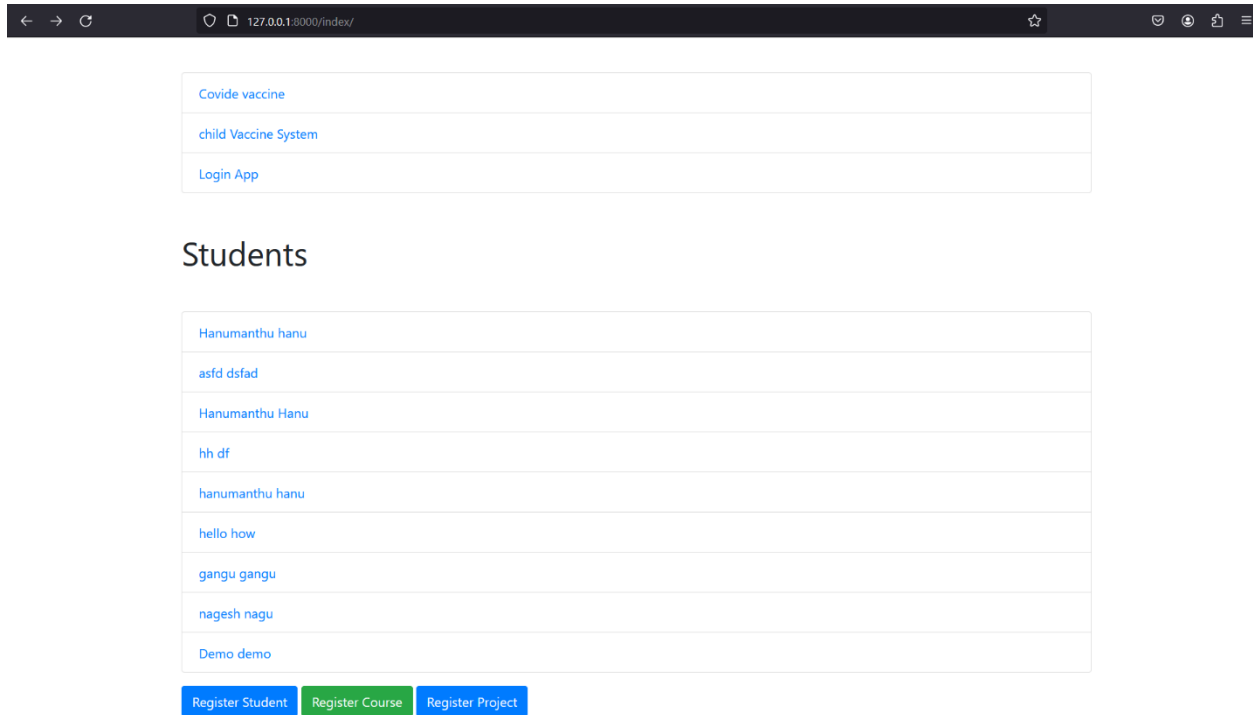
- Open your web browser and visit **http://127.0.0.1:8000/**.

- **Type or copy this http://127.0.0.1:8000/index/**

Final Output By Clicking Register Project and Register Student

Fig: Main Screen
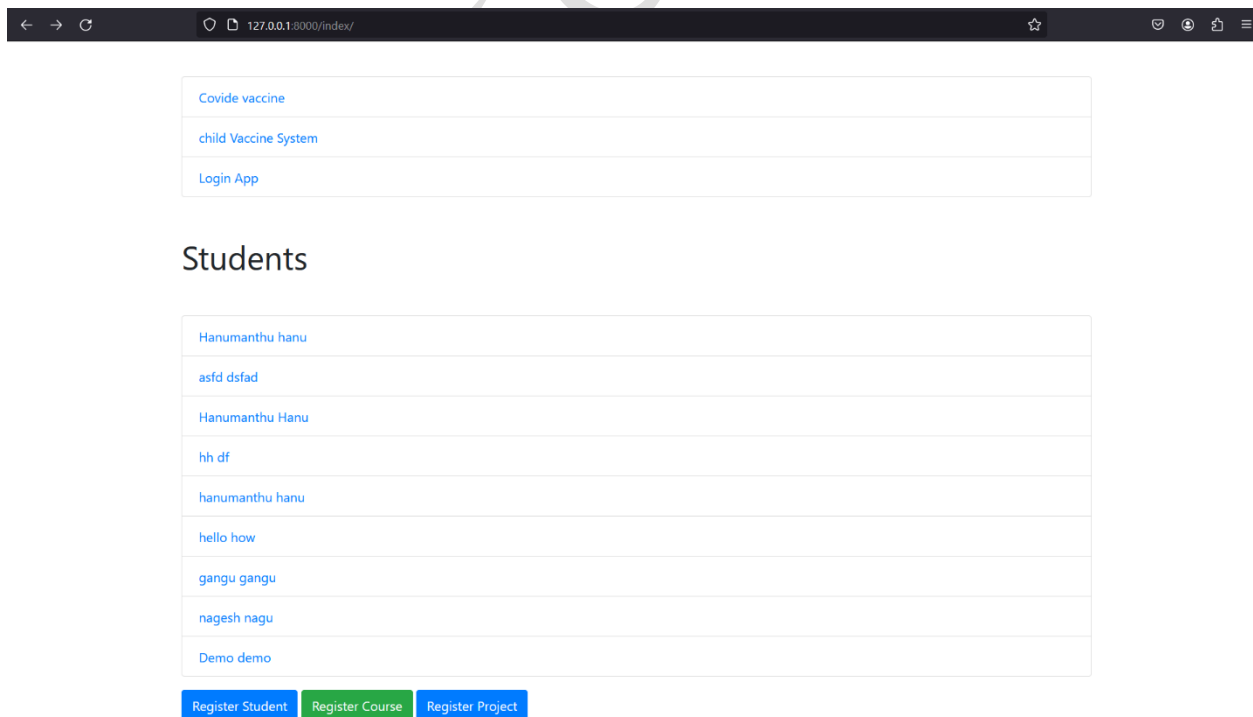
Fig: List View of Students Screen

127.0.0.1:8000/students/1/

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Fig: Detailed View of Student Screen