

S1: create project, app, templates, html and forms

```
C:\demo\django\feb_2023\L9>django-admin startproject p1_cmsproject
C:\demo\django\feb_2023\L9>cd p1_cmsproject
C:\demo\django\feb_2023\L9\p1_cmsproject>python manage.py startapp cmsapp
C:\demo\django\feb_2023\L9\p1_cmsproject>cd cmsapp
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp>mkdir templates
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp>cd templates
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp\templates>notepad home.html
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp\templates>notepad dept.html
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp\templates>notepad adddept.html
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp\templates>notepad stu.html
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp\templates>notepad addstu.html
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp\templates>cd..
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp>notepad forms.py
C:\demo\django\feb_2023\L9\p1_cmsproject\cmsapp>cd..
```

S2: settings.py

```
:
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'cmsapp',
]
:
```

S3: urls.py

```
from django.contrib import admin
from django.urls import path
from cmsapp.views import home, dept, adddept, remdept, stu, addstu, remstu

urlpatterns = [
    path('admin/', admin.site.urls),
    path("", home, name="home"),
    path("dept", dept, name="dept"),
    path("adddept", adddept, name="adddept"),
    path("remdept/<int:id>", remdept, name="remdept"),
    path("stu", stu, name="stu"),
    path("addstu", addstu, name="addstu"),
    path("remstu/<int:id>", remstu, name="remstu"),
]
```


S4: models.py

```
from django.db import models
```

```
class DeptModel(models.Model):  
    did = models.IntegerField(primary_key=True)  
    dname = models.CharField(max_length=30)  
  
    def __str__(self):  
        return str(self.dname)
```

```
class StuModel(models.Model):  
    rno = models.IntegerField(primary_key=True)  
    name = models.CharField(max_length=30)  
    dept = models.ForeignKey(DeptModel, on_delete=models.CASCADE)  
  
    def __str__(self):  
        return str(self.name)
```

S5: forms.py

```
from django import forms  
from .models import DeptModel, StuModel
```

```
class DeptForm(forms.ModelForm):  
    class Meta:  
        model = DeptModel  
        fields = "__all__"
```

```
class StuForm(forms.ModelForm):  
    class Meta:  
        model = StuModel  
        fields = "__all__"
```

S6: views.py

```
from django.shortcuts import render, redirect
from .models import DeptModel, StuModel
from .forms import DeptForm, StuForm
```

```
def home(request):
    return render(request, "home.html")
```

```
def dept(request):
    data = DeptModel.objects.all()
    return render(request, "dept.html", {"data":data})
```

```
def adddept(request):
    if request.method == "POST":
        data = DeptForm(request.POST)
        if data.is_valid():
            data.save()
            msg = "dept created"
            fm = DeptForm()
            return render(request, "adddept.html", {"fm":fm, "msg":msg})
        else:
            msg = "check errors"
            return render(request, "adddept.html", {"fm":data, "msg":msg})
    else:
        fm = DeptForm()
        return render(request, "adddept.html", {"fm":fm})
```

```
def remdept(request, id):
    de = DeptModel.objects.get(id=id)
    de.delete()
    return redirect("dept")
```

```
def stu(request):
    data = StuModel.objects.all()
    return render(request, "stu.html", {"data":data})
```

```
def addstu(request):
    if request.method == "POST":
        data = StuForm(request.POST)
        if data.is_valid():
            data.save()
            msg = "student created"
            fm = StuForm()
            return render(request, "addstu.html", {"fm":fm, "msg":msg})
        else:
            msg = "check errors"
            return render(request, "addstu.html", {"fm":data, "msg":msg})
    else:
        fm = StuForm()
        return render(request, "addstu.html", {"fm":fm})

def remstu(request, id):
    s = StuModel.objects.get(rno=id)
    s.delete()
    return redirect("stu")
```


S7: all html files

home.html

```
<html>
  <head>
    <title> Welcome to KIT </title>
    <style>
      * { font-size: 40px; }
      .nav { background-color:coral; }
      .nav a { color:white; text-decoration:none; margin:6%; }
    </style>
  </head>
  <body>
    <center>
      <div class="nav">
        <a href="{% url 'home' %}"> Home </a>
        <a href="{% url 'dept' %}"> Department </a>
        <a href="{% url 'stu' %}"> Student </a>
      </div>
      <h1> Home Page </h1>
    </center>
  </body>
</html>
```

dept.html

```
<html>
  <head>
    <title> Welcome to KIT </title>
    <style>
      * { font-size: 40px; }
      .nav { background-color:coral; }
      .nav a { color:white; text-decoration:none; margin:6%; }
    </style>
  </head>
  <body>
    <center>
      <div class="nav">
        <a href="{% url 'home' %}"> Home </a>
        <a href="{% url 'dept' %}"> Department </a>
        <a href="{% url 'stu' %}"> Student </a>
      </div>
      <h1> Dept Page </h1>
      <a href="{% url 'adddept' %}"> Add Department </a>
      <br>
      <table border="5" style="width:50%; text-align:center; " >
        <tr>
          <th> Dept Id </th>
          <th> Dept Name </th>
          <th> Delete </th>
        </tr>
        {% for d in data %}
        <tr>
          <td> {{ d.did }} </td>
          <td> {{ d.dname }}</td>
          <td> <a href="{% url 'remdept' id=d.did %}" onclick="return
confirm('r u sure???) "> Delete </a> </td>
        </tr>
        {% endfor %}
      </table>
    </center>
  </body>
</html>
```

adddept.html

```
<html>
  <head>
    <title> Welcome to KIT </title>
    <style>
      * { font-size: 40px; }
      .nav { background-color:coral; }
      .nav a { color:white; text-decoration:none; margin:6%; }
    </style>
  </head>
  <body>
    <center>
      <div class="nav">
        <a href="{% url 'home' %}"> Home </a>
        <a href="{% url 'dept' %}"> Department </a>
        <a href="{% url 'stu' %}"> Student </a>
      </div>
      <h1> Add Dept Page </h1>
      <form method="POST">
        {% csrf_token %}
        <table>
          {{ fm.as_table }}
        </table>
        <input type="Submit" />
      </form>
      {{ msg }}
    </center>
  </body>
</html>
```


stu.html

```
<html>
  <head>
    <title> Welcome to KIT </title>
    <style>
      * { font-size: 40px; }
      .nav { background-color:coral; }
      .nav a { color:white; text-decoration:none; margin:6%; }
    </style>
  </head>
  <body>
    <center>
      <div class="nav">
        <a href="{% url 'home' %}"> Home </a>
        <a href="{% url 'dept' %}"> Department </a>
        <a href="{% url 'stu' %}"> Student </a>
      </div>
      <h1> Student Page </h1>
      <a href="{% url 'addstu' %}"> Add Student </a>
      <br>
      <table border="5" style="width:50%; text-align:center; " >
        <tr>
          <th> Rno </th>
          <th> Name </th>
          <th> Dept </th>
          <th> Delete </th>
        </tr>
        {% for d in data %}
        <tr>
          <td> {{ d.rno }} </td>
          <td> {{ d.name }}</td>
          <td> {{ d.dept }}</td>
          <td> <a href="{% url 'remstu' id=d.rno %}" onclick="return
confirm('r u sure???) "> Delete </a> </td>
        </tr>
        {% endfor %}
      </table>
    </center>
  </body>
</html>
```


addstu.html

```
<html>
  <head>
    <title> Welcome to KIT </title>
    <style>
      * { font-size: 40px; }
      .nav { background-color:coral; }
      .nav a { color:white; text-decoration:none; margin:6%; }
    </style>
  </head>
  <body>
    <center>
      <div class="nav">
        <a href="{% url 'home' %}"> Home </a>
        <a href="{% url 'dept' %}"> Department </a>
        <a href="{% url 'stu' %}"> Student </a>
      </div>
      <h1> Add Student Page </h1>
      <form method="POST">
        {% csrf_token %}
        <table>
          {{ fm.as_table }}
        </table>
        <input type="Submit" />
      </form>
      {{ msg }}
    </center>
  </body>
</html>
```

s8: mm, mi and rs

```
C:\demo\django\feb_2023\L9\p1_cmsproject>python manage.py makemigrations
C:\demo\django\feb_2023\L9\p1_cmsproject>python manage.py migrate
C:\demo\django\feb_2023\L9\p1_cmsproject>python manage.py runserver
```