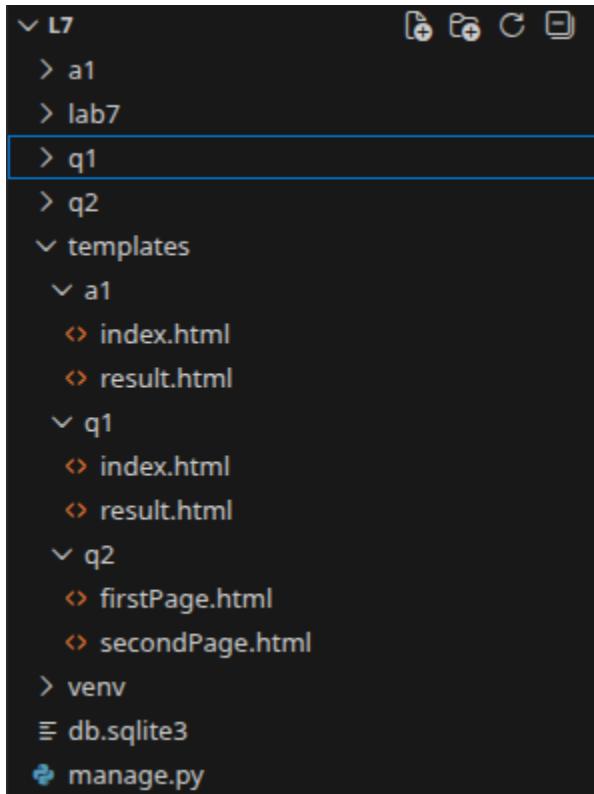


Lab 7 - Form Processing using Django – Part I



Settings.py:

```
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'q1',
    'q2',
    'a1',
]
```

Urls.py:

```
from django.contrib import admin
from django.urls import path, include

urlpatterns = [
    path('admin/', admin.site.urls),
    path('q1/', include('q1.urls')),
]
```

```
path('q2/', include('q2.urls')),  
path('a1/', include('a1.urls')),  
]
```

Q1 Codes:

Index.html:

```
<!DOCTYPE html>  
<html>  
<head>  
<title>Car Manufacturer</title>  
<style>  
form { margin: 20px; }  
.form-control { padding: 8px; margin: 5px 0; }  
button { padding: 10px 20px; }  
</style>  
</head>  
<body>  
<h2>Select Car Manufacturer</h2>  
<form method="POST" action="{% url 'q1_result' %}">  
{% csrf_token %}  
{% form.as_p %}  
<button type="submit">Submit</button>  
</form>  
</body>  
</html>
```

Result.html:

```
<!DOCTYPE html>  
<html>  
<head>  
<title>Car Details</title>  
</head>  
<body>  
<h2>Car Details</h2>  
<p>Manufacturer: <strong>{{ manufacturer }}</strong></p>  
<p>Model: <strong>{{ model }}</strong></p>  
<a href="{% url 'q1_index' %}">Go Back</a>  
</body>  
</html>
```

Forms.py:

```
from django import forms
```

```
class CarForm(forms.Form):
    MANUFACTURER_CHOICES = [
        ('', 'Choose...'),
        ('Toyota', 'Toyota'),
        ('Honda', 'Honda'),
        ('Ford', 'Ford'),
        ('Nissan', 'Nissan'),
        ('BMW', 'BMW'),
    ]
    manufacturer = forms.ChoiceField(
        choices=MANUFACTURER_CHOICES,
        widget=forms.Select(attrs={'class': 'form-control'})
    )
    model = forms.CharField(
        max_length=100,
        widget=forms.TextInput(attrs={
            'class': 'form-control',
            'placeholder': 'Enter car model name'
        })
    )
```

Urls.py:

```
from django.urls import path
from . import views

urlpatterns = [
    path("", views.index, name='q1_index'),
    path('result', views.result, name='q1_result'),
]
```

Views.py:

```
from django.shortcuts import render
from django.http import HttpResponseRedirect
from .forms import CarForm

def index(request):
    form = CarForm()
    return render(request, 'q1/index.html', {'form': form})

def result(request):
    if request.method == 'POST':
        form = CarForm(request.POST)
        if form.is_valid():
            manufacturer = form.cleaned_data['manufacturer']
            model = form.cleaned_data['model']
```

```

return render(request, 'q1/result.html', {
'manufacturer': manufacturer,
'model': model
})
return HttpResponse("Invalid request")

```

Screenshots:

The screenshot shows a browser window with two tabs. The top tab is titled "Car Manufacturer" and contains the rendered HTML output of the provided Python code. The bottom tab is titled "Car Details" and contains a form with dropdown and input fields. The "Manufacturer" field is set to "Honda" and the "Model" field is set to "Amaze". There are "Submit" and "Go Back" buttons at the bottom of the "Car Details" form.

Q2 Codes:

`firstpage.html:`

```

<!DOCTYPE html>
<html>
<head>
<title>First Page</title>
<style>
form { margin: 20px; }
.form-control { padding: 8px; margin: 5px 0; }
button { padding: 10px 20px; }
</style>
</head>
<body>
<h2>First Page</h2>
<form method="POST">
{{ csrf_token }}
{{ form.as_p }}
<button type="submit">Go to Second Page</button>
</form>
</body>
</html>

```

`secondpage.html:`

```

<!DOCTYPE html>
<html>
<head>
<title>Second Page</title>
</head>
<body>
<h2>Second Page</h2>
<label>Name: {{ name }}</label><br>
<label>Roll: {{ roll }}</label><br>
<label>Subject: {{ subject }}</label><br><br>
<a href="{% url 'q2_first_page' %}"><button>Go Back to First Page</button></a>
</body>
</html>

```

Forms.py:

```

from django import forms

class StudentForm(forms.Form):
    SUBJECT_CHOICES = [
        ("", 'Choose...'),
        ('Math', 'Math'),
        ('Science', 'Science'),
        ('English', 'English'),
        ('History', 'History'),
        ('Computer Science', 'Computer Science'),
    ]
    name = forms.CharField(
        max_length=100,
        widget=forms.TextInput(attrs={
            'class': 'form-control',
            'placeholder': 'Enter your name'
        })
    )
    roll = forms.CharField(
        max_length=50,
        widget=forms.TextInput(attrs={
            'class': 'form-control',
            'placeholder': 'Enter your roll number'
        })
    )
    subject = forms.ChoiceField(
        choices=SUPERJECT_CHOICES,
        widget=forms.Select(attrs={'class': 'form-control'})
    )

```

Urls.py:

```
from django.urls import path
from . import views

urlpatterns = [
    path("", views.first_page, name='q2_first_page'),
    path('second/', views.second_page, name='q2_second_page'),
    path('reset/', views.reset_session, name='q2_reset'),
]
```

Views.py:

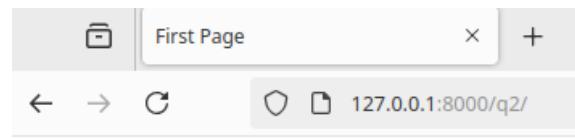
```
from django.shortcuts import render, redirect
from .forms import StudentForm

def first_page(request):
    if request.method == 'POST':
        form = StudentForm(request.POST)
        if form.is_valid():
            request.session['name'] = form.cleaned_data['name']
            request.session['roll'] = form.cleaned_data['roll']
            request.session['subject'] = form.cleaned_data['subject']
            return redirect('q2_second_page')
        else:
            form = StudentForm()
    return render(request, 'q2/firstPage.html', {'form': form})

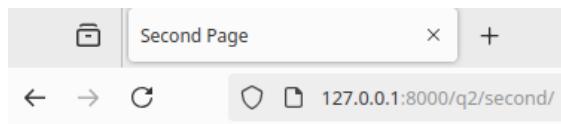
def second_page(request):
    name = request.session.get('name', "")
    roll = request.session.get('roll', "")
    subject = request.session.get('subject', "")
    return render(request, 'q2/secondPage.html', {
        'name': name,
        'roll': roll,
        'subject': subject
    })

def reset_session(request):
    request.session.flush()
    return redirect('q2_first_page')
```

Screenshots:



First Page



Second Page

Name: Hiten

Roll: 23

Subject: Computer Science

Name:

Roll:

Subject: ▾

[Go Back to First Page](#)

[Go to Second Page](#)