

LAB-7

Form Processing using Django – Part I

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-CSE_D//45

Q1// Develop a web application using Django framework to demonstrate the transfer of multiple parameters between web pages. User should be presented with a dropdown list containing car manufacturers, a text box which takes model name of the manufacturer and a submit button. On submitting the web page, the user is forwarded to a new page. This new page should display the selected car manufacturer name and the model name.

A1//

views.py:

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

def car_form(request):
    if request.method == 'POST':
        form = CarForm(request.POST)
        if form.is_valid():
            manufacturer = form.cleaned_data['manufacturer']
            model_name = form.cleaned_data['model_name']

            return render(request, 'carinfo/car_result.html', {
                'manufacturer': manufacturer,
                'model_name': model_name,
            })
        else:
            form = CarForm()
            return render(request, 'carinfo/car_form.html', {'form': form})
```

carinfo/urls.py:

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

urlpatterns = [
    path("", views.car_form, name='car_form'),
]
```

carproject/urls.py:

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

urlpatterns = [
    path('admin/', admin.site.urls),
    path("", include('carinfo.urls')), # Link to carinfo app's URLs
]
```

forms.py:

```
from django import forms

class CarForm(forms.Form):
    CAR_MANUFACTURERS = [
        ('toyota', 'Toyota'),
        ('ford', 'Ford'),
        ('bmw', 'BMW'),
        ('honda', 'Honda'),
        ('audi', 'Audi'),
    ]

    manufacturer = forms.ChoiceField(choices=CAR_MANUFACTURERS)
    model_name = forms.CharField(max_length=100)
```

car_form.html:

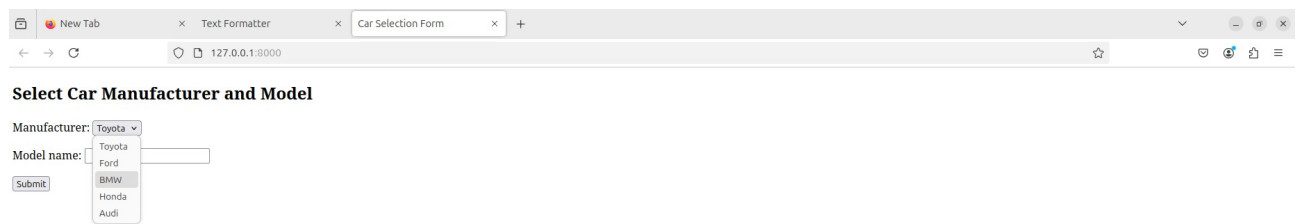
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Car Selection Form</title>
</head>
<body>
    <h2>Select Car Manufacturer and Model</h2>
    <form method="post">
        {% csrf_token %}
        {{ form.as_p }}
        <button type="submit">Submit</button>
    </form>
</body>
</html>
```

car_result.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
```

```
<meta charset="UTF-8">
<title>Car Selection Result</title>
</head>
<body>
  <h2>Selected Car Information</h2>
  <p>Car Manufacturer: {{ manufacturer }}</p>
  <p>Model Name: {{ model_name }}</p>
  <a href="{% url 'car_form' %}">Go Back</a>
</body>
</html>
```

OUTPUT:



The screenshot shows a web browser with three tabs: 'New Tab', 'Text Formatter', and 'Car Selection Form'. The address bar displays '127.0.0.1:8000'. The page title is 'Select Car Manufacturer and Model'. The form contains two dropdown menus: 'Manufacturer:' with 'Toyota' selected, and 'Model name:' with 'Toyota' selected. A 'Submit' button is located below the 'Model name:' dropdown. A list of manufacturers (Toyota, Ford, BMW, Honda, Audi) is visible as a dropdown menu for the 'Manufacturer:' field.



The screenshot shows a web browser with three tabs: 'New Tab', 'Text Formatter', and 'Car Selection Result'. The address bar displays '127.0.0.1:8000'. The page title is 'Selected Car Information'. The page content displays the selected car information: 'Car Manufacturer: toyota' and 'Model Name: Prathir'. A 'Go Back' link is visible at the bottom of the page.

Q2// Create a page firstPage.html with two TextBoxes [Name, Roll], DropDownList [Subjects], and a button. Create another page secondPage.html with a label and a button. When the user clicks the button in first Page, he should be sent to the second page and display the contents passed from first page in the label. The button in second page should navigate the user back to firstPage. Use Django sessions to transfer information.

A2//

views.py:

```
from django.shortcuts import render, redirect
from django.http import HttpResponseRedirect
from django.contrib.sessions.models import Session
```

```
def first_page(request):
    if request.method == 'POST':
        # Get the values from the form
        name = request.POST.get('name')
        roll = request.POST.get('roll')
        subject = request.POST.get('subject')

        request.session['name'] = name
        request.session['roll'] = roll
        request.session['subject'] = subject

        return redirect('second_page')

    return render(request, 'userinfo/firstPage.html')
```

```
def second_page(request):
    name = request.session.get('name')
    roll = request.session.get('roll')
    subject = request.session.get('subject')

    if name and roll and subject:
        return render(request, 'userinfo/secondPage.html', {
            'name': name,
            'roll': roll,
            'subject': subject
        })
    else:
        return HttpResponseRedirect("No data available from session.")
```

sessionproject/urls.py:

```

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

urlpatterns = [
    path('admin/', admin.site.urls),
    path("", include('userinfo.urls')), # Link to userinfo app's URLs
]

```

userinfo/urls.py:

```

from django.urls import path
from . import views

urlpatterns = [
    path("", views.first_page, name='first_page'),
    path('second/', views.second_page, name='second_page'),
]

```

forms.py:

```

from django import forms

class UserDetailsForm(forms.Form):
    name = forms.CharField(label='Name', max_length=100)
    roll = forms.CharField(label='Roll', max_length=100)
    subject = forms.ChoiceField(label='Subject', choices=[
        ('Math', 'Math'),
        ('Science', 'Science'),
        ('English', 'English'),
        ('History', 'History'),
        ('Geography', 'Geography'),
    ])

```

firstPage.html:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>First Page</title>
</head>
<body>
    <h2>Enter your information</h2>
    <form method="POST">
        {% csrf_token %}
        <label for="name">Name:</label>
        <input type="text" name="name" id="name" required><br><br>

        <label for="roll">Roll Number:</label>

```

```
<input type="text" name="roll" id="roll" required><br><br>

<label for="subject">Select Subject:</label>
<select name="subject" id="subject">
  <option value="Maths">Maths</option>
  <option value="Science">Science</option>
  <option value="English">English</option>
  <option value="History">History</option>
</select><br><br>

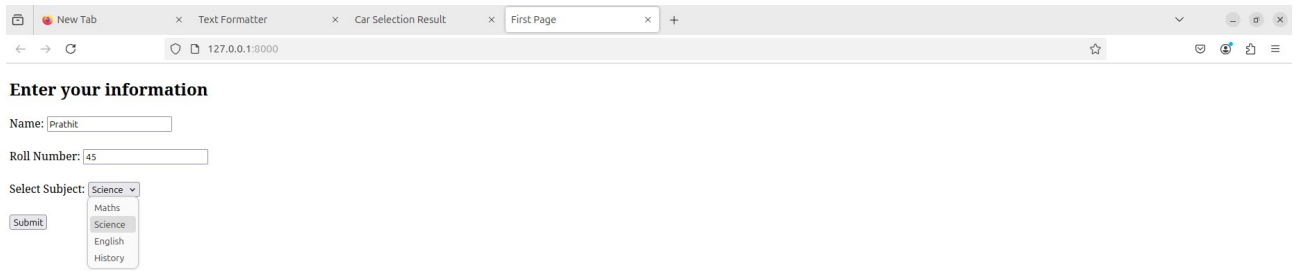
  <button type="submit">Submit</button>
</form>
</body>
</html>
```

secondPage.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Second Page</title>
</head>
<body>
  <h2>Information received</h2>
  <p><strong>Name:</strong> {{ name }}</p>
  <p><strong>Roll Number:</strong> {{ roll }}</p>
  <p><strong>Subject:</strong> {{ subject }}</p>

  <form action="{% url 'first_page' %}">
    <button type="submit">Go Back to First Page</button>
  </form>
</body>
</html>
```

OUTPUT:



The screenshot shows a web browser with four tabs: 'New Tab', 'Text Formatter', 'Car Selection Result', and 'First Page'. The address bar shows the URL '127.0.0.1:8000'. The page content includes a form titled 'Enter your information' with the following fields:

- Name:
- Roll Number:
- Select Subject:

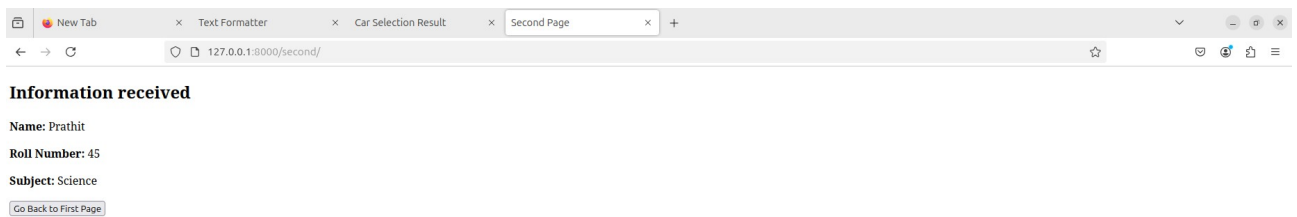
Science

Maths

Science

English

History
-



The screenshot shows the same web browser with the 'Second Page' tab selected. The address bar shows the URL '127.0.0.1:8000/second/'. The page content displays the information received from the first page:

- Name: Prathit
- Roll Number: 45
- Subject: Science
-