

## Lab No: 7 Form Processing using Django – Part I

Name: Ketan Goud

Reg No: 220905260

Section: D D2

Roll No: 39

1) 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.

```
Forms.py x
Lab 7 > car_project > carapp > Forms.py
1 # carapp/forms.py
2 from django import forms
3
4 class CarForm(forms.Form):
5     manufacturer_choices = [
6         ('toyota', 'Toyota'),
7         ('ford', 'Ford'),
8         ('honda', 'Honda'),
9         ('bmw', 'BMW'),
10        ('mercedes', 'Mercedes-Benz'),
11    ]
12
13    manufacturer = forms.ChoiceField(
14        choices=manufacturer_choices,
15        widget=forms.Select(attrs={'class': 'form-control'})
16    )
17    model_name = forms.CharField(
18        max_length=100,
19        widget=forms.TextInput(attrs={'class': 'form-control', 'placeholder': 'Enter Model Name'})
20    )
21
```

```
forms.py  urls.py x
Lab 7 > car_project > carapp > urls.py
1 # carapp/urls.py
2 from django.urls import path
3 from . import views
4
5 urlpatterns = [
6     path('', views.car_form, name='car_form'),
7     path('results/', views.car_results, name='car_results'),
8 ]
9
```

```
Lab 7 > car_project > carapp > views.py
1 # carapp/views.py
2 from django.shortcuts import render
3 from .forms import CarForm
4
5 def car_form(request):
6     if request.method == 'POST':
7         form = CarForm(request.POST)
8         if form.is_valid():
9             manufacturer = form.cleaned_data['manufacturer']
10            model_name = form.cleaned_data['model_name']
11            return render(request, 'carapp/car_results.html', {'manufacturer': manufacturer, 'model_name': model_name})
12     else:
13         form = CarForm()
14
15     return render(request, 'carapp/car_form.html', {'form': form})
16
17 def car_results(request):
18     # This view will display the results after the form is submitted
19     return render(request, 'carapp/car_results.html')
20
```

```

16 """
17 # car_project/urls.py
18 from django.contrib import admin
19 from django.urls import path, include
20
21 urlpatterns = [
22     path('admin/', admin.site.urls),
23     path('', include('carapp.urls')),
24 ]
25

```

Lab 7 > car\_project > carapp > templates > carapp > car\_form.html > ...

```

1 <!-- carapp/templates/carapp/car_form.html -->
2 <!DOCTYPE html>
3 <html lang="en">
4 <head>
5     <meta charset="UTF-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>Car Form</title>
8     <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" rel="stylesheet">
9 </head>
10 <body>
11     <div class="container">
12         <h2>Select Car Manufacturer and Model</h2>
13         <form method="POST">
14             {% csrf_token %}
15             {{ form.as_p }}
16             <button type="submit" class="btn btn-primary">Submit</button>
17         </form>
18     </div>
19 </body>
20 </html>

```

Lab 7 > car\_project > carapp > templates > carapp > car\_results.html > ...

```

1 <!-- carapp/templates/carapp/car_results.html -->
2 <!DOCTYPE html>
3 <html lang="en">
4 <head>
5     <meta charset="UTF-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>Car Results</title>
8     <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" rel="stylesheet">
9 </head>
10 <body>
11     <div class="container">
12         <h2>You selected:</h2>
13         <p><strong>Manufacturer:</strong> {{ manufacturer }}</p>
14         <p><strong>Model Name:</strong> {{ model_name }}</p>
15         <br>
16         <a href="{% url 'car form' %}" class="btn btn-secondary">Go Back</a>
17     </div>
18 </body>
19 </html>
20

```

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## You selected:

**Manufacturer:** toyota

**Model Name:** Innova

[Go Back](#)

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### Select Car Manufacturer and Model

Manufacturer:

Model name:

[Submit](#)

2) 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

```

17 # session_project/urls.py
18 from django.contrib import admin
19 from django.urls import path, include
20
21 urlpatterns = [
22     path('admin/', admin.site.urls),
23     path('', include('studentapp.urls')),
24 ]

```

```

Lab 7 > session_project > studentapp > forms.py
1 # studentapp/forms.py
2 from django import forms
3
4 SUBJECT_CHOICES = [
5     ('math', 'Mathematics'),
6     ('science', 'Science'),
7     ('english', 'English'),
8     ('history', 'History'),
9 ]
10
11 class StudentForm(forms.Form):
12     name = forms.CharField(max_length=100, widget=forms.TextInput(attrs={'class': 'form-control'}))
13     roll = forms.CharField(max_length=20, widget=forms.TextInput(attrs={'class': 'form-control'}))
14     subject = forms.ChoiceField(choices=SUBJECT_CHOICES, widget=forms.Select(attrs={'class': 'form-control'}))
15

```

```

Lab 7 > session_project > studentapp > urls.py
1 # studentapp/urls.py
2 from django.urls import path
3 from . import views
4
5 urlpatterns = [
6     path('', views.first_page, name='first_page'),
7     path('second/', views.second_page, name='second_page'),
8 ]
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```

```

6 if request.method == 'POST':
7     form = StudentForm(request.POST)
8     if form.is_valid():
9         # Save the form data in session
10         request.session['name'] = form.cleaned_data['name']
11         request.session['roll'] = form.cleaned_data['roll']
12         request.session['subject'] = form.cleaned_data['subject']
13         return redirect('second_page')
14     else:
15         form = StudentForm()
16
17     return render(request, 'studentapp/firstPage.html', {'form': form})
18
19 def second_page(request):
20     # Retrieve the session data
21     name = request.session.get('name', None)
22     roll = request.session.get('roll', None)
23     subject = request.session.get('subject', None)
24
25     return render(request, 'studentapp/secondPage.html', {
26         'name': name,
27         'roll': roll,
28         'subject': subject
29     })
30

```

Lab 7 > session\_project > studentapp > templates > studentapp > <? firstPage.html > ...

```
1  <!-- studentapp/templates/studentapp/firstPage.html -->
2  <!DOCTYPE html>
3  <html lang="en">
4  <head>
5      <meta charset="UTF-8">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>First Page</title>
8      <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" rel="stylesheet">
9  </head>
10 <body>
11     <div class="container">
12         <h2>Student Information</h2>
13         <form method="POST">
14             {% csrf_token %}
15             {{ form.as_p }}
16             <button type="submit" class="btn btn-primary">Submit</button>
17         </form>
18     </div>
19 </body>
20 </html>
```

Lab 7 > session\_project > studentapp > templates > studentapp > secondPage.html > ...

```
1 <!-- studentapp/templates/studentapp/secondPage.html -->
2 <!DOCTYPE html>
3 <html lang="en">
4 <head>
5     <meta charset="UTF-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>Second Page</title>
8     <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" rel="stylesheet">
9 </head>
10 <body>
11     <div class="container">
12         <h2>Student Details</h2>
13         <p><strong>Name:</strong> {{ name }}</p>
14         <p><strong>Roll:</strong> {{ roll }}</p>
15         <p><strong>Subject:</strong> {{ subject }}</p>
16         <br>
17         <a href="{% url 'first_page' %}" class="btn btn-secondary">Go Back</a>
18     </div>
19 </body>
20 </html>
```

127.0.0.1:8000

## Student Information

Name:

Roll:

Subject:

127.0.0.1:8000/second/

## Student Details

**Name:** Ketan Goud

**Roll:** 39

**Subject:** history