**IT Lab 6: Form Processing using Django**

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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.

**templates/prog1.html**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<style>

body{

background-image: linear-gradient(to right,#ffffff,#bcf4ea,#c2ff59);

font-size: 30px;

font-family: 'Times New Roman', Times, serif;

}

option{

font-size: 20px;

color: white;

background-color: #1d1c36;

}

select{

font-size: 20px;

color: white;

background-color: #1d1c36;

}

form{

background-color: white;

padding: 20px 20px;

display: inline;

position: absolute;

top: 80px;

left: 40%;

box-shadow: 10px 10px 5px grey;

}

input{

background-color: #1d1c36 ;

color: white;

font-size: 20px;

padding: 5px 0px;

width: 200px;

}

tr{

margin-top: 300px;

padding-top: 20px;

}

</style>

<title>Document</title>

</head>

<body style="text-align:center;">

<form action="MFInfo" >

<table>

{{form.as\_table}}

</table>

<br>

<input type="submit">

</form>

</body>

</html>

**templates/prog1\_result.html**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

<style>

body{

background-image: linear-gradient(to right,#ffffffe3,#f4bce6,#59afffa4);

font-size: 30px;

color: blue;

text-align: center;

}

table{

font-size: 30px;

position: absolute;

left: 40%;

top: 80px;

background-color: white;

padding: 10px;

box-shadow: 10px 10px 5px grey;

}

</style>

</head>

<body>

<table>

<tr>

<th>manufacturer:</th>

<th>{{manufacturer}}</th>

</tr>

<tr>

<th>model:</th>

<th>{{model}}</th>

</tr>

</table>

</body>

</html>

**forms.py**

from django import forms

from django.forms.widgets import Widget

class car(forms.Form):

manufacturer = forms.ChoiceField(choices=[("Hyundai","Hyundai"),("Mercedes-Benz","Mercedes-Benz"),("McLaren","McLaren"),("BMW","BMW")],label="Manufacturer")

model = forms.CharField(label="Model")

**urls.py**

from django.urls import path

from . import views

urlpatterns = [

path('',views.home,name="home"),

path('MFInfo',views.result,name = "result")

]

**urls.py**

from django.contrib import admin

from django.urls import path,include

urlpatterns = [

path('admin/', admin.site.urls),

#path('',include('prob1.urls')),

#path('',include('prob2.urls')),

#path('',include('prob3.urls')),

#path('',include('prob4.urls')),

#path('',include('prob5.urls')),

path('',include('prob6.urls')),

]

**views.py:**

from django.http import request

from django.shortcuts import render

from .forms import car

# Create your views here.

def home(request):

form = car()

return render(request,'prog1.html',{"form":form})

def result(request):

c = request.GET["manufacturer"]

p = request.GET["model"]

return render(request,"prog1\_result.html",{"manufacturer":c,"model":p}

**Output:**

Graphical user interface

Description automatically generated

Graphical user interface, application

Description automatically generated

3) Create a Register page and Success page with the following requirements:

i. Register page should contain four input TextBoxes for UserName, Password,

Email id and Contact Number and also a button to submit. Make the username as

compulsory field and other fields as optional.

ii. On button click, Success page is displayed with message "Welcome

{UserName}" and also his Email and Contact Number has to be displayed.

iii. Use secure technique to send details to the Success page (Hint: use csrftoken)

**templates/prog3.html**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<form action="sec\_page" method="POST">

{% csrf\_token %}

<table>

{{form.as\_table}}

</table>

<br>

<input type="submit">

</form>

</body>

</html>

**Templates/prog3\_result.html**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<form action="sec\_page" method="POST">

{% csrf\_token %}

<table>

{{form.as\_table}}

</table>

<br>

<input type="submit">

</form>

</body>

</html>

**forms.py**

from django import forms

class Student(forms.Form):

name = forms.CharField(label="Name")

roll\_no = forms.IntegerField(label="Roll\_no:")

subject = forms.ChoiceField(choices=[("CN","CN"),("EOM","EOM"),("OS","OS"),("SE","SE")],label="Subjects")

**urls.py**

from django.urls import path

from . import views

urlpatterns = [

path('',views.home,name="home"),

path('sec\_page',views.secPage,name="secPage"),

path('first\_page',views.firstPage,name="firstPage")

]

**urls.py**

from django.contrib import admin

from django.urls import path,include

urlpatterns = [

path('admin/', admin.site.urls),

#path('',include('prob1.urls')),

#path('',include('prob2.urls')),

path('',include('prob3.urls')),

#path('',include('prob4.urls')),

#path('',include('prob5.urls')),

#path('',include('prob6.urls')),

]

**views.py:**

from django.http import request

from django.shortcuts import render

from .forms import Registration

# Create your views here.

def home(request):

form = Registration()

return render(request,'prog3.html',{"form":form})

def register(request):

form = Registration(request.POST)

if form.is\_valid():

username = form.cleaned\_data["username"]

email = form.cleaned\_data["email"]

contact\_no = form.cleaned\_data["contact\_no"]

return render(request,"prog3\_2.html",{"username":username,"email":email,"contact\_no":contact\_no})

return render(request,"prog3\_2.html",{"username":" ","email":" ","contact\_no":" "})

**Output:**

Graphical user interface, text

Description automatically generated

Graphical user interface, text

Description automatically generated

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 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.

**templates/prog2.html:**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<form action="sec\_page" method="POST">

{% csrf\_token %}

<table>

{{form.as\_table}}

</table>

<br>

<input type="submit">

</form>

</body>

</html>

**templates/prog2\_result.html:**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<table>

<tr>

<th style="text-align: end;">Name: </th>

<th style="text-align: start;">{{name}}</th>

</tr>

<tr>

<th style="text-align: end;">Roll\_no: </th>

<th style="text-align: start;">{{roll\_no}}</th>

</tr>

<tr>

<th style="text-align: end;">Subjects: </th>

<th style="text-align: start;">{{subject}}</th>

</tr>

</table>

<br>

<form action="first\_page">

<input type="submit" value="home">

</form>

</body>

</html>

**forms.py:**

from django import forms

from django.forms.widgets import Widget

class Registration(forms.Form):

username = forms.CharField(label="Username")

password = forms.CharField(label="Password",widget=forms.PasswordInput())

email = forms.EmailField(label="E-mail",widget=forms.EmailInput(),required=False)

contact\_no = forms.IntegerField(label="contact",widget=forms.NumberInput(),required=False,min\_value=100000000,max\_value=9999999999)

**urls.py:**

from django.urls import path

from . import views

urlpatterns = [

path('',views.home,name="home"),

path('register',views.register,name="register")

]

**urls.py:**

from django.contrib import admin

from django.urls import path,include

urlpatterns = [

path('admin/', admin.site.urls),

#path('',include('prob1.urls')),

path('',include('prob2.urls')),

#path('',include('prob3.urls')),

#path('',include('prob4.urls')),

#path('',include('prob5.urls')),

#path('',include('prob6.urls')),

]

**views.py:**

from django.http import request

from django.shortcuts import render

from .forms import Student

# Create your views here.

def home(request):

form = Student()

return render(request,'prog2.html',{"form":form})

def secPage(request):

form = Student(request.POST)

if form.is\_valid():

a = request.session

a['name']=form.cleaned\_data['name']

a['roll\_no']=form.cleaned\_data["roll\_no"]

a['subject']=form.cleaned\_data["subject"]

return render(request,'prog2\_2.html',{"name":a["name"],"roll\_no":a["roll\_no"],"subject":a["subject"]})

else:

return render(request,'prog2\_2.html',{"name":" ","roll\_no":" ","subject":" "})

def firstPage(request):

if request.session.has\_key('name'):

del request.session["name"]

if request.session.has\_key('roll\_no'):

del request.session["roll\_no"]

if request.session.has\_key('roll\_no'):

del request.session["roll\_no"]

form = Student()

return render(request,'prog2.html',{"form":form})

**Output:**

**Graphical user interface, text

Description automatically generatedGraphical user interface, text, application

Description automatically generated**

4) Design a website with two pages.

First page contains:

RadioButton with HP, Nokia, Samsung, Motorola, Apple as options.

CheckBox with Mobile and Laptop as items.

TextBox to enter quantity.

There is a button with text as "Produce Bill".

On Clicking Produce Bill button, item should be displayed with total amount on another

page.

**templates/prog4.html:**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<form action="bill" method="GET">

{{form}}

<br>

<input type="submit" value="Produce Bill">

</form>

</body>

</html>

**Templates/prog4\_result.html:**

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<span>{{devices}}: {{quantity}} x ₹{{cost}} = ₹{{total}}</span><br>

<button>Proceed to Pay</button>

</body>

</html>

**forms.py:**

from django import forms

from django.forms.widgets import Widget

class Device(forms.Form):

devices = forms.ChoiceField(choices=[("HP","HP"),("Nokia","Nokia"),("Samsung","Samsung"),("Motorola","Motorola"),("Apple","Apple")],label="Select the Device",widget=forms.RadioSelect())

quantity = forms.IntegerField(label="Enter the quantity",min\_value=1,max\_value=6,widget=forms.NumberInput())

**urls.py:**

from django.urls import path

from . import views

urlpatterns = [

path('',views.home,name="home"),

path('bill',views.bill,name="bill")

]

**urls.py:**

from django.contrib import admin

from django.urls import path,include

urlpatterns = [

path('admin/', admin.site.urls),

#path('',include('prob1.urls')),

#path('',include('prob2.urls')),

#path('',include('prob3.urls')),

path('',include('prob4.urls')),

#path('',include('prob5.urls')),

#path('',include('prob6.urls')),

]

**views.py:**

from django.http import request

from django.shortcuts import render

from .forms import Device

# Create your views here.

def home(request):

form = Device()

return render(request,'prog4.html',{"form":form})

def bill(request):

form = Device(request.GET)

if form.is\_valid():

devices = form.cleaned\_data['devices']

quantity = int(form.cleaned\_data['quantity'])

if devices == "HP":

device\_cost = 40000

elif devices == "Nokia":

device\_cost = 15000

elif devices == "Samsung":

device\_cost = 50000

elif devices == "Motorola":

device\_cost = 25000

else:

device\_cost = 90000

total = device\_cost \* quantity

return render(request,'prog4\_2.html',{'devices':devices,"cost":device\_cost,"quantity":quantity,"total":total})

**Output:**

**Graphical user interface, text

Description automatically generatedGraphical user interface, text

Description automatically generated**