

Django signup and login and Logout Code step by step guidance :-

Step 1:-

Models.py file code of your app folder:-

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

Step 2:- create forms.py file in your app folder

forms.py file code :-

```
from django import forms
from django.contrib.auth.forms import UserCreationForm
from django.contrib.auth.models import User
class NewUserForm(UserCreationForm):
    email = forms.EmailField(required=True)

    class Meta:
        model = User
        fields = ["username", "email", "password1", "password2"]
```

Step 3:- urls.py file of app folder:-

```
from django.urls import path

from . import views
urlpatterns=[

path('',views.index,name='index'),
path('home/',views.home,name='home'),
path('homepage/',views.homepage,name='homepage'),

path("register", views.register_request, name="register"),
    path("login", views.login_request, name="login"),
    path("logout", views.logout_request, name= "logout"),

]
```

Step 4:- views.py file of app folder:-

```
from urllib import request
from django.shortcuts import render,redirect
from .forms import NewUserForm
from django.contrib.auth import login, authenticate,logout #add this
from django.contrib import messages

from django.contrib.auth.forms import AuthenticationForm

def homepage(request):

    return render(request, "homepage.html")

def home(request):
    serviceData="Registration successful"
    data={'serviceData':serviceData
        }

    return render(request,"home.html",data)

def login_request(request):
    if request.method == "POST":
        form = AuthenticationForm(request, data=request.POST)
        if form.is_valid():
            username = form.cleaned_data.get('username')
            password = form.cleaned_data.get('password')
            user = authenticate(username=username, password=password)
            if user is not None:
                login(request, user)
                messages.info(request, f"You are now logged in as {username}.")
                return redirect("homepage")
            else:
                messages.error(request,"Invalid username or password.")
        else:
            messages.error(request,"Invalid username or password.")
    form = AuthenticationForm()
    return render(request, 'login.html', context={"login_form":form})

def register_request(request):
```

```

if request.method == "POST":
    form = NewUserForm(request.POST)
    if form.is_valid():
        user = form.save()
        login(request, user)
        messages.success(request, "Registration successful." )
        return redirect("home")
    messages.error(request, "Unsuccessful registration. Invalid
information.")
    form = NewUserForm()
    return render (request, 'register.html', context={"register_form":form})

def logout_request(request):
    logout(request)
    messages.info(request, "You have successfully logged out.")
    return redirect("homepage")

```

Step 5:- Create templates folder and write code for **homepage.html** :-

```

<!--Navbar-->
<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <a class="navbar-brand" href="#">Navbar</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarText" aria-controls="navbarText" aria-expanded="False" aria-
label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="navbarText">
    <ul class="navbar-nav mr-auto">
      {% if user.is_authenticated %}

      <li class="nav-item">
        <a class="nav-link" href="{% url 'logout' %}">Logout</a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Welcome, {{user.username}}</a>
      </li>

      {% else %}

      <li class="nav-item">
        <a class="nav-link" href="{% url 'login' %}">Login</a>

```

```
    </li>

    {% endif %}
  </ul>
</div>
</nav>
```

Register.html file code:-

```
<div class="container py-5">
  <h1>Register</h1>
  <form method="POST">
    {% csrf_token %}
    {{ register_form }}
    <button class="btn btn-primary" type="submit">Register</button>
  </form>
  <p class="text-center">If you already have an account, <a href="{% url
'login' %}">login</a> instead.</p>
</div>
```

Login.html file code:-

```
<!--Login-->
<div class="container py-5">
  <h1>Login</h1>
  <form method="POST">
    {% csrf_token %}
    {{ login_form }}
    <button class="btn btn-primary" type="submit">Login</button>
  </form>
  <p class="text-center">Don't have an account? <a href="{% url 'register'
%}">Create an account</a>.</p>
</div>
```

Home.html file code:-

```
<h1 class="myclass">hello world how are you  
    {{data}}  
</h1>
```

Now to run it use following command

py manage.py runserver in your command prompt as shown below

```
(env) D:\myap\my_proejct>py manage.py runserver  
Watching for file changes with StatReloader  
Performing system checks...  
  
System check identified no issues (0 silenced).  
  
You have 1 unapplied migration(s). Your project may not work  
Run 'python manage.py migrate' to apply them.  
April 21, 2023 - 17:55:29  
Django version 4.1.5, using settings 'my_proejct.settings'  
Starting development server at http://127.0.0.1:8000/  
Quit the server with CTRL-BREAK.
```

<http://127.0.0.1:8000/hello/register>

and you will see output

Register

Username:

Required. 150 characters or fewer. Letters, digits and @/./+/_ only. Email: Password:

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation:

Enter the same password as before, for verification.

If you already have an account, [login](#) instead.

<http://127.0.0.1:8000/hello/login>

Login

Username: Password:

Don't have an account? [Create an account](#).