

Here is a **basic Django login system code example** using Django's built-in authentication system.

## 📄 Requirements:

- Django installed (`pip install django`)
- `django.contrib.auth` added in `INSTALLED_APPS`

## 📁 Project Folder Structure (myproject/)

```
pgsql

myproject/
├── accounts/                                # Custom app for login, registration, etc.
│   ├── migrations/
│   ├── templates/
│   │   └── accounts/
│   │       ├── login.html
│   │       ├── register.html
│   │       └── profile.html
│   ├── __init__.py
│   ├── admin.py
│   ├── apps.py
│   ├── forms.py
│   ├── models.py
│   ├── tests.py
│   ├── urls.py
│   └── views.py
│
├── myproject/                               # Project configuration folder
│   ├── __init__.py
│   ├── asgi.py
│   ├── settings.py
│   ├── urls.py
│   └── wsgi.py
```



## ✓ Setup Steps (Quick Recap)

### 1. Create project:

```
bash  
  
django-admin startproject myproject  
cd myproject
```

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### 2. Create app:

```
bash  
  
python manage.py startapp accounts
```

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### 3. Add 'accounts' to INSTALLED\_APPS in settings.py.

### 4. Create templates in:

```
bash  
  
accounts/templates/accounts/login.html
```

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## App-specific URLs:

accounts/urls.py

### App-specific URLs:

```
python  
  
from django.urls import path  
from . import views  
  
urlpatterns = [  
    path('login/', views.login_view, name='login'),  
    path('register/', views.register_view, name='register'),  
    path('profile/', views.profile_view, name='profile'),  
    path('logout/', views.logout_view, name='logout'),  
]
```

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myproject/urls.py

Project-level URL config:

```
python Copy Edit  
  
from django.contrib import admin  
from django.urls import path, include  
  
urlpatterns = [  
    path('admin/', admin.site.urls),  
    path('accounts/', include('accounts.urls')), # Link the app URLs  
]
```

In your views.py:

```
from django.shortcuts import render, redirect  
from django.contrib.auth import authenticate, login, logout  
from django.contrib import messages  
from django.contrib.auth.decorators import login_required  
  
def login_view(request):  
    if request.method == "POST":  
        username = request.POST.get('username')  
        password = request.POST.get('password')  
        user = authenticate(request, username=username, password=password)  
  
        if user is not None:  
            login(request, user)  
            return redirect('home')  
        else:  
            messages.error(request, "Invalid username or password")  
  
    return render(request, 'login.html')  
  
def logout_view(request):  
    logout(request)  
    return redirect('login')  
  
@login_required  
def home(request):  
    return render(request, 'home.html')
```

## 3. Templates

`login.html:-`

```
<!DOCTYPE html>
<html>
<head><title>Login</title></head>
<body>
  <h2>Login</h2>
  {% if messages %}
    {% for message in messages %}
      <p style="color:red;">{{ message }}</p>
    {% endfor %}
  {% endif %}
  <form method="post">
    {% csrf_token %}
    <input type="text" name="username" placeholder="Username"><br>
    <input type="password" name="password" placeholder="Password"><br>
    <button type="submit">Login</button>
  </form>
</body>
</html>
```

`home.html:-`

```
<!DOCTYPE html>
<html>
<head><title>Home</title></head>
<body>
  <h2>Welcome, {{ request.user.username }}</h2>
  <a href="{% url 'logout' %}">Logout</a>
</body>
</html>
```

## □ 4. Settings Check

Make sure your `settings.py` includes:

```
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LOGIN_URL = '/login/'
```

## 🔗 5. Creating a User (for testing)

You can create a user from the Django shell:

```
python manage.py createsuperuser
```