

# Django MVC Login & Registration (No Database)

## # Step 1: Install Python & Django

Install Python from <https://www.python.org/downloads/> and check "Add to PATH".

Install Django using:

```
pip install django
```

## # Step 2: Create a Django Project

```
django-admin startproject myproject
```

```
cd myproject
```

```
python manage.py runserver
```

## # Step 3: Create a Django App

```
python manage.py startapp myapp
```

## # Step 4: Define URL Routes

Edit myproject/urls.py:

```
from django.contrib import admin
```

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

```
from myapp import views
```

```
urlpatterns = [
```

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

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

```
    path('register/', views.register, name='register'),
```

```
    path('login/', views.login_view, name='login'),
```

```
    path('logout/', views.logout_view, name='logout'),
```

**]**

## **# Step 5: Create Views (Controller in MVC)**

**Edit myapp/views.py:**

```
from django.shortcuts import render, redirect
```

```
users = {}
```

```
def home(request):
```

```
    user = request.session.get('user')
```

```
    return render(request, 'home.html', {'user': user})
```

```
def register(request):
```

```
    if request.method == "POST":
```

```
        username = request.POST.get('username')
```

```
        password = request.POST.get('password')
```

```
        if username in users:
```

```
            return render(request, 'register.html', {'error': 'User exists!'})
```

```
        users[username] = password
```

```
        request.session['user'] = username
```

```
        return redirect('home')
```

```
    return render(request, 'register.html')
```

```
def login_view(request):
```

```
    if request.method == "POST":
```

```
        username = request.POST.get('username')
```

```
        password = request.POST.get('password')
```

```
        if users.get(username) == password:
```

```
            request.session['user'] = username
```

```
            return redirect('home')
```

```
        return render(request, 'login.html', {'error': 'Invalid
credentials!'})
    return render(request, 'login.html')
```

```
def logout_view(request):
    request.session.flush()
    return redirect('home')
```

## # Step 6: Create HTML Templates

Inside myapp/templates, create:

home.html:

```
<!DOCTYPE html>
<html>
<head><title>Home</title></head>
<body>
    <h1>Welcome</h1>
    {% if user %}
        <p>Logged in as <strong>{{ user }}</strong></p>
        <a href="{% url 'logout' %}">Logout</a>
    {% else %}
        <a href="{% url 'login' %}">Login</a> |
        <a href="{% url 'register' %}">Register</a>
    {% endif %}
</body>
</html>
```

## # Step 7: Run Migrations (Fix Session Error)

```
python manage.py migrate
```

## **# Step 8: Run the Server**

```
python manage.py runserver
```

**# Done!**

**Try accessing:**

- Home: <http://127.0.0.1:8000/>**
- Register: <http://127.0.0.1:8000/register/>**
- Login: <http://127.0.0.1:8000/login/>**