

This lab session covers Django Contrib Package (admin, sessions and messages). By the end of this session, students should have a very good understanding of how to use these packages.

Pre-lab Preparation:

1. Pages of the previous lab.
2. Add the necessary contrib packages in settings.py

Lab Activities:

Task 1: Create a register page with a URL '/users/register' with any necessary HTML files and view functions.

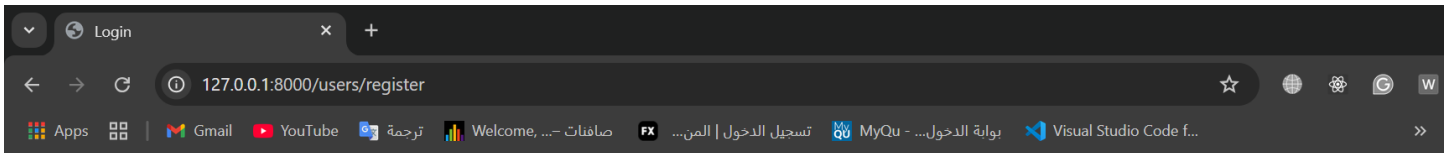
```
libraryproject > apps > usermodule > views.py > ...
3  from django.shortcuts import render, redirect
4  from django.contrib.auth.forms import UserCreationForm
5  from django.contrib.auth import authenticate, login
6  from django.contrib.auth.forms import AuthenticationForm
7  from django.contrib.auth import logout
8
9
10 def register_view(request):
11     if request.method == 'POST':
12         form = UserCreationForm(request.POST)
13         if form.is_valid():
14             form.save()
15             messages.success(request, 'You have successfully registered.')
16             return redirect('login')
17         else:
18             messages.error(request, 'Registration failed.')
19     else:
20         form = UserCreationForm()
21     return render(request, 'usermodule/register.html', {'form': form})
22
23
```

libraryproject > apps > usermodule > templates > usermodule > <> register.html > a

```

1
2 {% extends "usermodule/base.html" %}
3
4 {% block title %}Login{% endblock %}
5
6 {% block content %}
7 <h2>Register</h2>
8 <form method="POST">
9     {% csrf_token %}
10     {{ form.as_p }}
11     <button type="submit">Register</button>
12 </form>
13 <a href="{% url 'login' %}">Already have an account? Login</a>
14 {% endblock %}
15

```



[Login](#) | [Register](#)

Register

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

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.

[Already have an account? Login](#)

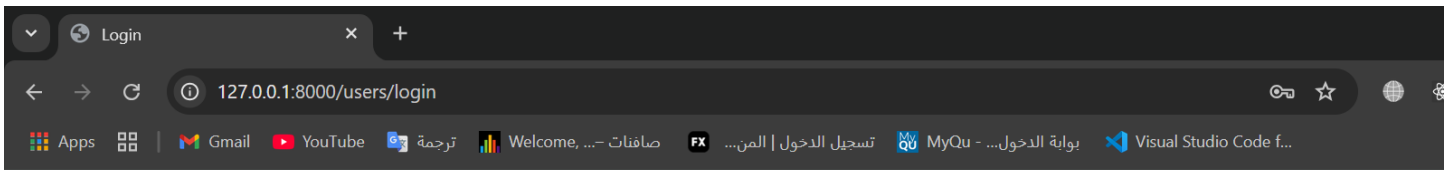
Task 2: Create a login page with a URL '/users/login' with any necessary HTML files and view functions.

libraryproject > apps > usermodule > views.py > ...

```
22
23
24
25 def login_view(request):
26     if request.method == 'POST':
27         form = AuthenticationForm(data=request.POST)
28         if form.is_valid():
29             user = form.get_user()
30             login(request, user)
31             messages.success(request, 'Login successful.')
32             return redirect('list_students')
33         else:
34             messages.error(request, 'Invalid credentials.')
35     else:
36         form = AuthenticationForm()
37     return render(request, 'usermodule/login.html', {'form': form})
38
39
40
```

libraryproject > apps > usermodule > templates > usermodule > login.html > ...

```
1  {% extends "usermodule/base.html" %}
2
3  {% block title %}Login{% endblock %}
4
5  {% block content %}
6      <h2>Login</h2>
7      <form method="POST">
8          {% csrf_token %}
9          {{ form.as_p }}
10         <button type="submit">Login</button>
11     </form>
12 {% endblock %}
13
```

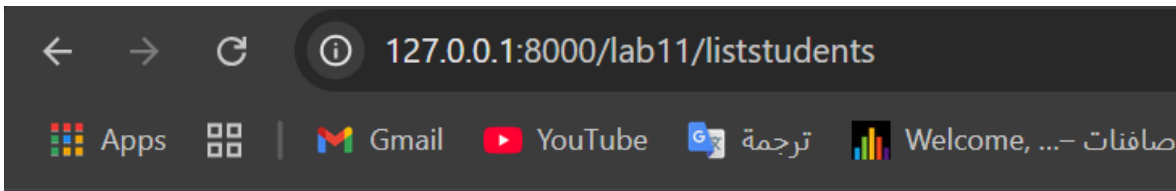
[Login](#) | [Register](#)

Login

Username: Password:

Task 3: Apply login permission to the previous lab. If the user is not logged in, redirect the user to the login page.

```
libraryproject > apps > lab11 > views.py > add_image
4  from .models import Student2 ,Gallery
5  from django.contrib.auth.decorators import login_required
6
7  @login_required(login_url='/users/login')
8  def list_students(request):
9      students = Student.objects.all()
10     return render(request, 'lab11/list_students.html', {'students': students})
11
12  @login_required(login_url='/users/login')
13  def add_student(request):
14      if request.method == 'POST':
15          form = StudentForm(request.POST)
16          if form.is_valid():
17              form.save()
18              return redirect('list_students')
19      else:
20          form = StudentForm()
21          return render(request, 'lab11/add_student.html', {'form': form})
22
23  @login_required(login_url='/users/login')
24  def edit_student(request, id):
```



Welcome, amal | [Logout](#)

Login successful.

Students

[Add New Student](#)

- safinat (21) - London [Edit](#) [Delete](#)

Task 4: Add a link '/users/logout' to sign out users to all pages where the user is logged in.

```
libraryproject > apps > usermodule > urls.py > ...  
1  from django.urls import path  
2  from . import views  
3  
4  urlpatterns = [  
5      path('register', views.register_view, name='register'),  
6      path('login', views.login_view, name='login'),  
7      path('logout', views.logout_view, name='logout'),  
8  
9  ]  
10
```

libraryproject > apps > usermodule > templates > usermodule > <> base.html > ...

```

1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>{% block title %}My App{% endblock %}</title>
6  </head>
7  <body>
8      {% if user.is_authenticated %}
9          <p>Welcome, {{ user.username }} | <a href="{% url 'logout' %}">Logout</a></p>
10     {% else %}
11         <p><a href="{% url 'login' %}">Login</a> | <a href="{% url 'register' %}">Register</a></p>
12     {% endif %}
13
14     {% block content %}{% endblock %}
15 </body>
16 </html>
17

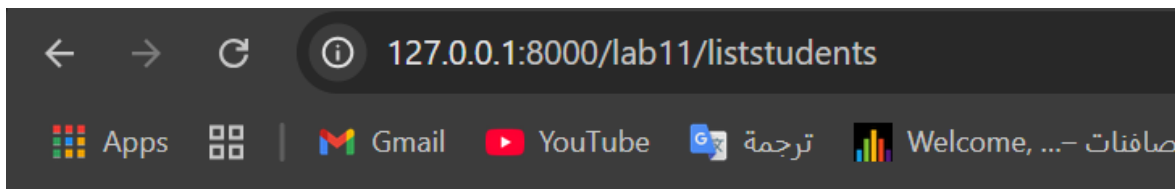
```

```

34
35 def logout_view(request):
36     logout(request)
37     messages.info(request, 'Logged out.')
38     return redirect('login')
39

```

Task 5: Provide messages to users, like, 'you have successfully registered', 'login successfully', or 'error message.'



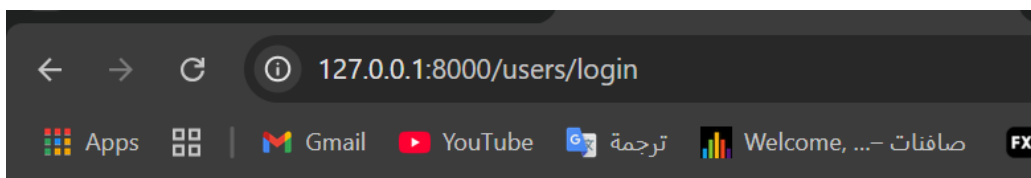
Welcome, amal | [Logout](#)

Login successful.

Students

[Add New Student](#)

- safinat (21) - London [Edit](#) [Delete](#)



[Login](#) | [Register](#)

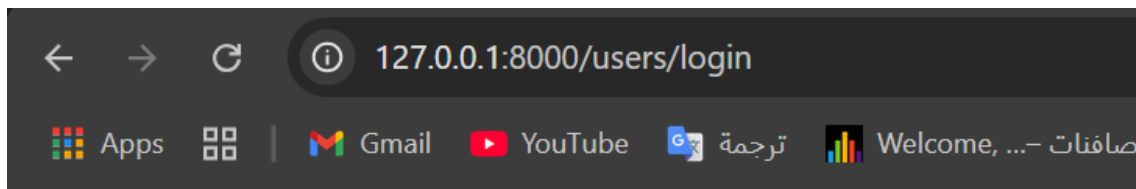
Logged out.

Login

Username:

Password:

Login



[Login](#) | [Register](#)

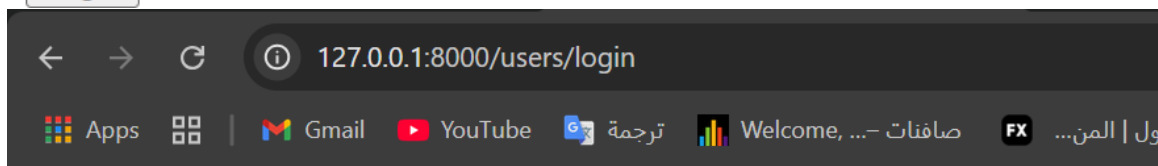
Invalid credentials.

Login

Username:

Password:

Login



[Login](#) | [Register](#)

You have successfully registered.

Login

Username:

Password:

Login