

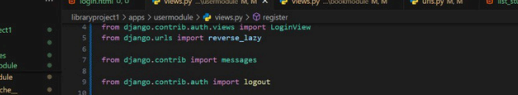
# Lab 12



Django Contrib Package

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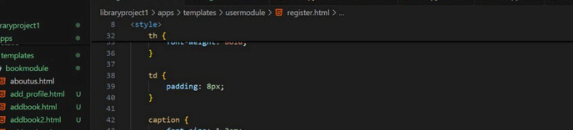
Task 1  
Code



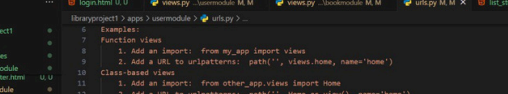
```

1  from django.contrib.auth import login
2  from django.urls import reverse_lazy
3  from django.contrib import messages
4  from django.contrib.auth import login
5
6  # Create your views here.
7
8  def register(request):
9      if request.method == "POST":
10         form = UserCreationForm(request.POST)
11         if form.is_valid():
12             form.save()
13             messages.success(request, "You have successfully registered!")
14             return redirect('login')
15         else:
16             messages.error(request, "Please correct the error below.")
17     else:
18         form = UserCreationForm()
19         return render(request, 'usermodule/register.html', {'form': form})
20
21 class CustomLoginView(LoginView):
22     template_name = 'usermodule/login.html'
23     next_page = reverse_lazy('list_students')

```



The screenshot shows a web browser window with the address bar displaying 'localhost:3000'. The page has a dark theme. On the left is a sidebar menu with a 'login' button at the top, followed by a list of links: 'aboutus.html', 'add\_profile.html', 'addbook.html', 'addbook2.html', 'addstudents.html', 'addstudents2.html', 'booklist.html', 'edit\_profile.html', 'editbook.html', 'editbook2.html', 'editstudents.html', 'editstudents2.html', 'formatting.html', 'index.html', 'index.html', 'list\_bookshand', 'list\_profile.html', 'list\_students.html', and 'list\_students2.html'. The main content area displays a login form with a 'login' button, a 'password' input field, and a 'confirm password' input field. Below the form is a link that says 'Already have an account? Login/a'. The browser's developer tools are open, showing the 'Elements' panel with the login form's HTML structure.



The screenshot shows a PyCharm IDE with a Django project. The left sidebar displays a file explorer with a tree view of the project structure. The main editor shows a Python file named 'urls.py' with Django URL configuration code. The code includes imports for 'django.urls', 'django.contrib.admin', 'django.urls', 'django.contrib', 'django.urls', and 'django.urls'. It defines a list of 'urlpatterns' with paths for 'register', 'login', and 'logout'.

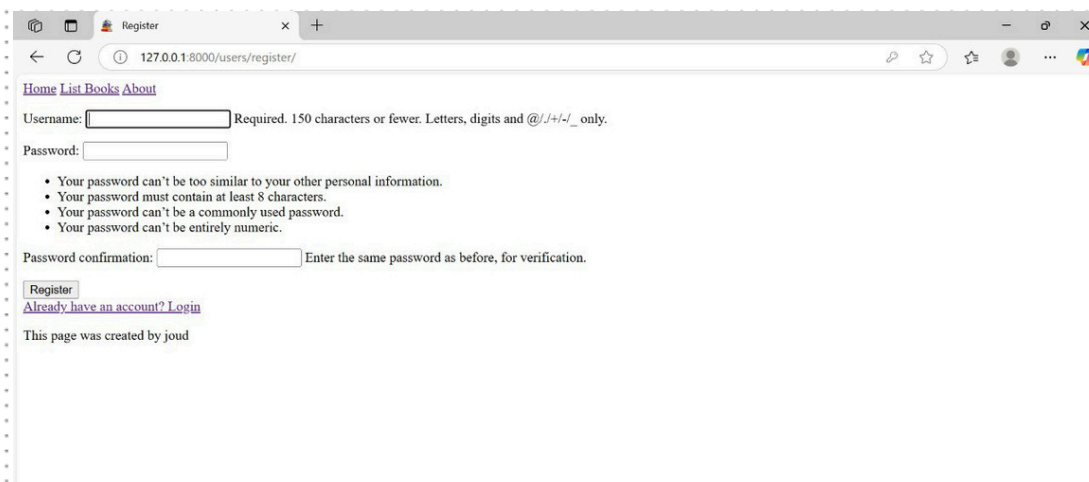
```

1  from django.urls import path
2  from django.urls import include
3  from django.urls import include
4  from django.urls import include
5  from django.urls import include
6  from django.urls import include
7  from django.urls import include
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11 from django.urls import include
12 from django.urls import include
13 from django.urls import include
14 from django.urls import include
15 from django.urls import include
16 from django.urls import include
17 from django.urls import include
18 from django.urls import include
19 from django.urls import include
20 from django.urls import include
21 from django.urls import include
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98 from django.urls import include
99 from django.urls import include
100 from django.urls import include

```

# Task 1

## Output



A screenshot of a web browser window titled "Register". The address bar shows the URL "127.0.0.1:8000/users/register/". The page content includes navigation links "Home", "List Books", and "About". The registration form consists of a "Username:" label followed by a text input field and the text "Required. 150 characters or fewer. Letters, digits and @/./+/-/\_ only.", a "Password:" label followed by a text input field, and a list of password requirements: "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.", and "Your password can't be entirely numeric.". Below the password field is a "Password confirmation:" label followed by a text input field and the text "Enter the same password as before, for verification.". At the bottom of the form is a "Register" button, a link "Already have an account? Login", and a footer text "This page was created by joud".

[Home](#) [List Books](#) [About](#)

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](#)

This page was created by joud

# Task 2

## Code

```
File Edit Selection View Go Run ...
Python CS471

libraryproject > apps > usermodule > views.py > register

def register(request):
    14 if request.method == "POST":
    15     form = UserCreationForm(request.POST)
    16     if form.is_valid():
    17         form.save()
    18         messages.success(request, 'You have successfully registered!')
    19         return redirect('login')
    20     else:
    21         messages.error(request, 'Please correct the error below.')
    22
    23 else:
    24     form = UserCreationForm()
    25     return render(request, 'usermodule/register.html', {'form': form})
    26
    27
    28 class CustomLoginView(LoginView):
    29     template_name = 'usermodule/login.html'
    30     next_page = 'reverse_lazy(list_students)'
    31
    32
    33 def logout_view(request):
    34     logout(request)
    35     return redirect('login')
```

```
File Edit Selection View Go Run ...
Python CS471

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

<style>
    40
    41
    42     caption {
    43         font-size: 1.2em;
    44         margin: 10px;
    45         text-align: center;
    46         font-weight: bold;
    47     }
    48 </style>
    49 {% endblock stylesheets %}
    50
    51 {% block content %}
    52 <form method="POST">
    53     {% csrf_token %}
    54     {{ form.as_p }}
    55     <button type="submit">Login</button>
    56 </form>
    57 <a href="{% url 'register' %}">Don't have an account? Register</a>
    58 {% endblock content %}
```

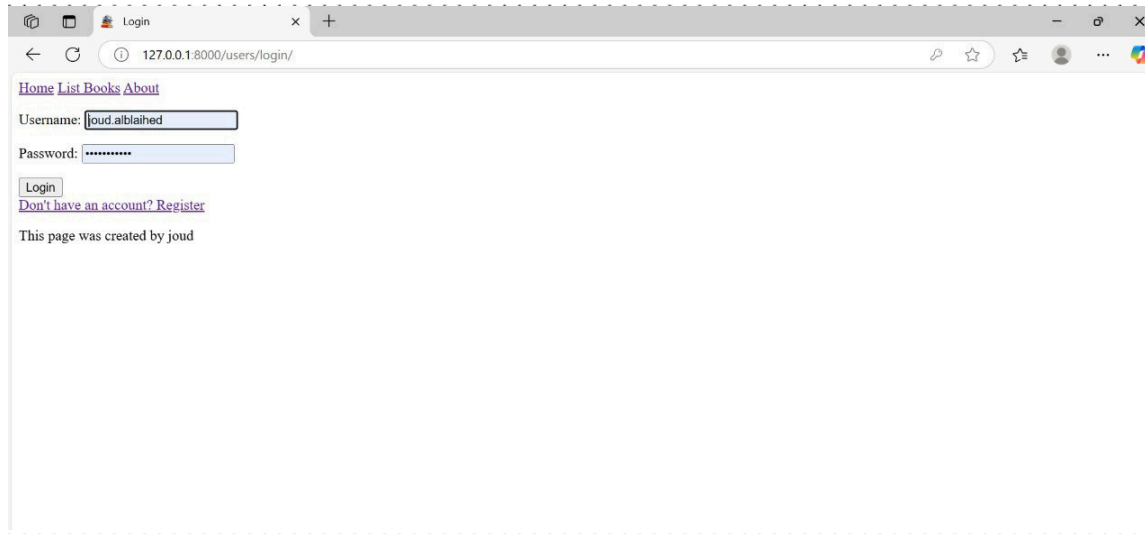
```
File Edit Selection View Go Run ...
Python CS471

libraryproject > apps > usermodule > urls.py > ...

7 Function views
8 1. Add an import: from my_app import views
9 2. Add a URL to urlpatterns: path('/', views.home, name='home')
10 Class-based views
11 1. Add an import: from other_app.views import Home
12 2. Add a URL to urlpatterns: path('/', Home.as_view(), name='home')
13 Including another URLconf
14 1. Import the include() function: from django.urls import include, path
15 2. Add a URL to urlpatterns: path('blog/', include('blog.urls'))
16 ---
17 from django.contrib import admin
18 from django.urls import path
19 from .views import register, CustomLoginView
20 from django.contrib.auth.views import LoginView
21 from . import views
22
23 urlpatterns = [
24     path('register/', register, name='register'),
25     path('login/', CustomLoginView.as_view(), name='login'),
26     path('logout/', views.logout_view, name='logout'),
27 ]
```

## Task 2

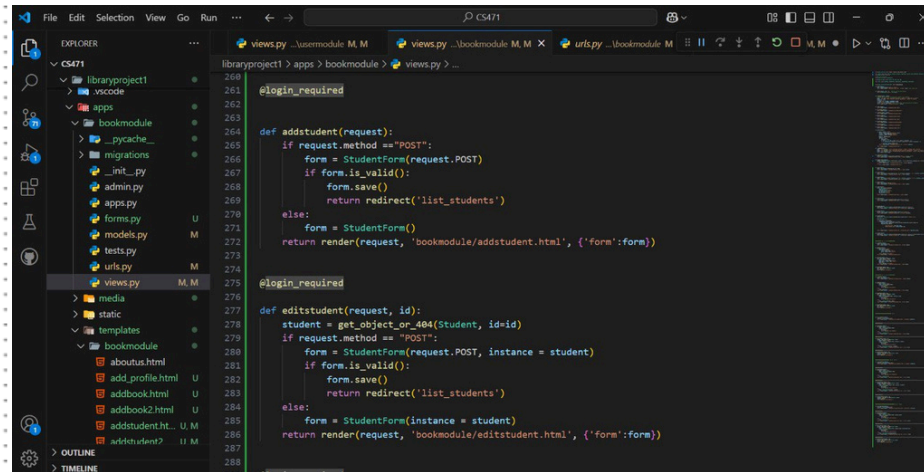
### Output





# Task 3

## Code



The screenshot shows a VS Code editor with a project named 'CS471'. The Explorer sidebar on the left displays the project structure, including folders like 'libraryproject1', 'migrations', 'media', 'static', and 'templates', and files like 'admin.py', 'apps.py', 'forms.py', 'models.py', 'tests.py', 'urls.py', and 'views.py'. The 'views.py' file is selected and open in the main editor. The code in 'views.py' is as follows:

```
libraryproject1 > apps > bookmodule > views.py > ...
260
261 @login_required
262
263 def addstudent(request):
264     if request.method == "POST":
265         form = StudentForm(request.POST)
266         if form.is_valid():
267             form.save()
268             return redirect('list_students')
269         else:
270             form = StudentForm()
271     return render(request, 'bookmodule/addstudent.html', {'form':form})
272
273 @login_required
274
275 def editstudent(request, id):
276     student = get_object_or_404(Student, id=id)
277     if request.method == "POST":
278         form = StudentForm(request.POST, instance = student)
279         if form.is_valid():
280             form.save()
281             return redirect('list_students')
282         else:
283             form = StudentForm(instance = student)
284     return render(request, 'bookmodule/editstudent.html', {'form':form})
285
286
287
288
```

# Task 3

## Output

127.0.0.1:8000/books/students/list/

You have successfully registered!

Name	Age	Address	Edit	Delete
Aisha	21	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Fahad	23	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Sara	20	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Mona	22	Unairah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Youssef	24	Unairah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Lama	23	Unairah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Khalid	21	Riyadh	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>

127.0.0.1:8000/users/login/

[Home](#) [List](#) [Books](#) [About](#)

Username:

Password:

[Login](#)

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

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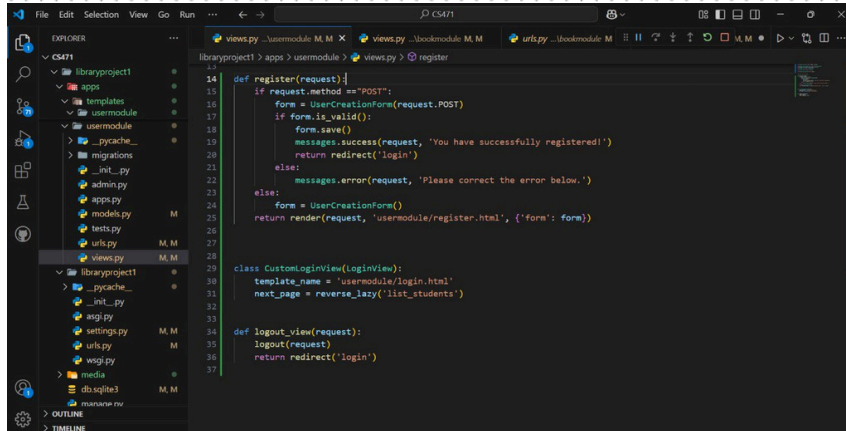
127.0.0.1:8000/books/students/list/

[Home](#) [List](#) [Books](#) [About](#)

[Add New Book](#)

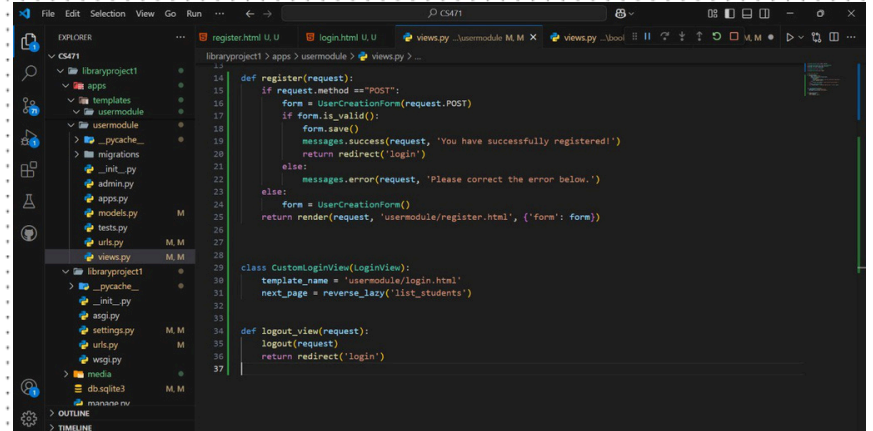
Name	Age	Address	Edit	Delete
Aisha	20	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Fahad	23	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Sara	20	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Mona	22	Unairah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Youssef	24	Unairah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Lama	23	Unairah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
			<a href="#">Edit</a>	<a href="#">Delete</a>

## Task 4 Code



This screenshot shows the VS Code editor with the Django project 'libraryproject' open. The file explorer on the left shows the project structure, including 'apps', 'templates', 'usermodule', and 'views.py'. The main editor window displays the 'register' view in 'views.py'.

```
14 def register(request):
15     if request.method == "POST":
16         form = UserCreationForm(request.POST)
17         if form.is_valid():
18             form.save()
19             messages.success(request, 'You have successfully registered!')
20             return redirect('login')
21         else:
22             messages.error(request, 'Please correct the error below.')
23     else:
24         form = UserCreationForm()
25     return render(request, 'usermodule/register.html', {'form': form})
26
27
28 class CustomLoginView(LoginView):
29     template_name = 'usermodule/login.html'
30     next_page = reverse_lazy('list_students')
31
32
33
34 def logout_view(request):
35     logout(request)
36     return redirect('login')
```



This screenshot shows the VS Code editor with the Django project 'libraryproject' open. The file explorer on the left shows the project structure, including 'apps', 'templates', 'usermodule', and 'views.py'. The main editor window displays the 'login' view in 'views.py'.

```
14 def register(request):
15     if request.method == "POST":
16         form = UserCreationForm(request.POST)
17         if form.is_valid():
18             form.save()
19             messages.success(request, 'You have successfully registered!')
20             return redirect('login')
21         else:
22             messages.error(request, 'Please correct the error below.')
23     else:
24         form = UserCreationForm()
25     return render(request, 'usermodule/register.html', {'form': form})
26
27
28 class CustomLoginView(LoginView):
29     template_name = 'usermodule/login.html'
30     next_page = reverse_lazy('list_students')
31
32
33
34 def logout_view(request):
35     logout(request)
36     return redirect('login')
```



# Task 4

## Output

[Logout](#) [Here to register](#)  
This page was created by joud

			<a href="#">student</a>	<a href="#">student</a>
Majid	20	Dammam	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Amal	21	Dammam	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>

Login

127.0.0.1:8000/users/login/

[Home](#) [List](#) [Books](#) [About](#)

Username:

joud.ablahed

Password:

\*\*\*\*\*

Login

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

This page was created by joud

List of Students Page

127.0.0.1:8000/books/students/tst/

[Home](#) [List](#) [Books](#) [About](#)

You need to be logged in to add or edit students.

Name	Age	Address	Edit	Delete
Aisha	20	Buraidah	You need to be logged in to edit students.	You need to be logged in to delete students.
Fahad	23	Buraidah	You need to be logged in to edit students.	You need to be logged in to delete students.
			You need to be	You need to be

## Task 5

### Code

```
if form.is_valid():
    form.save()
    messages.success(request, 'You have successfully registered!')
    return redirect('login')
else:
    messages.error(request, 'Please correct the error below.')
```

## Task 5

### Output

• You have successfully registered!

Name	Age	Address	Edit	Delete
Aisha	21	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Fahad	23	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Sara	20	Buraidah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Mona	22	Unaizah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Yousef	24	Unaizah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Lama	23	Unaizah	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>
Khalid	21	Riyadh	<a href="#">Edit this student</a>	<a href="#">Delete this student</a>