

Lecture # 16

CSC336 Web Technologies

Credit Hours: 3(2, 1)

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Flight Booking System

flights > urls.py

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

```
from . import views
```

```
urlpatterns = [  
    path("", views.index, name="index"),  
    path("<int:flight_id>", views.flight, name="flight"),  
    path("<int:flight_id>/book", views.book, name="book")  
]
```

flights > views.py

```
from django.http import HttpResponseRedirect
from django.urls import reverse
def book(request, flight_id):
    if request.method == "POST":
        flight = Flight.objects.get(pk=flight_id)
        passenger =
Passenger.objects.get(pk=int(request.POST["passenger"]))
        passenger.flights.add(flight)
        return HttpResponseRedirect(reverse("flight",
args=(flight.id,)))
```

flights > templates > flights > flight.html

```
<li>No Passenger.</li>
```

```
{% endfor %}
```

```
</ul>
```

```
<h2>Add Passenger</h2>
```

```
<form action="{% url 'book' flight.id %}" method="POST">
```

```
{% csrf_token %}
```

```
<select name="passenger">
```

```
</select>
```

```
</form>
```

```
<a href="{% url 'index' %}">Back to Flight List.</a>
```

```
{% endblock %}
```

flights > views.py

```
def flight(request, flight_id):  
    flight = Flight.objects.get(pk=flight_id)  
    return render(request, "flights/flight.html", {  
        "flight": flight,  
        "passengers": flight.passengers.all(),  
        "non_passengers": Passenger.objects.exclude(flights=flight).all()  
    })
```

flights > templates > flights > flight.html

```
<h2>Add Passenger</h2>
```

```
<form action="{% url 'book' flight.id %}" method="POST">
```

```
    {% csrf_token %}
```

```
    <select name="passenger">
```

```
        {% for passenger in non_passengers %}
```

```
            <option value="{{ passenger.id }}">{{ passenger }}</option>
```

```
        {% empty %}
```

```
            <option value="-1">No Passenger available</option>
```

```
        {% endfor %}
```

```
    </select>
```

```
    <input type="submit">
```

```
</form>
```

```
<a href="{% url 'index' %}">Back to Flight List.</a>
```

```
{% endblock %}
```

flights > admin.py

```
# Register your models here.
```

```
class FlightAdmin(admin.ModelAdmin):
```

```
    list_display = ("id", "origin", "destination", "duration")
```

```
admin.site.register(Airport)
```

```
admin.site.register(Flight, FlightAdmin)
```

```
admin.site.register(Passenger)
```


➤ <http://localhost:8000/admin/>

flights > admin.py

```
# Register your models here.
```

```
class FlightAdmin(admin.ModelAdmin):  
    list_display = ("id", "origin", "destination", "duration")
```

```
class PassengerAdmin(admin.ModelAdmin):  
    filter_horizontal = ("flights",)
```

```
admin.site.register(Airport)  
admin.site.register(Flight, FlightAdmin)  
admin.site.register(Passenger, PassengerAdmin)
```

➤ <http://localhost:8000/admin/>

Login System

➤ `python manage.py startapp users`

airline > settings.py

```
INSTALLED_APPS = [  
    'flights',  
    'users',  
    'django.contrib.admin',  
    'django.contrib.auth',  
    'django.contrib.contenttypes',  
    'django.contrib.sessions',  
    'django.contrib.messages',  
    'django.contrib.staticfiles',  
]
```

airline > urls.py

```
from django.contrib import admin
from django.urls import path
from django.urls.conf import include

urlpatterns = [
    path('admin/', admin.site.urls),
    path('flights/', include("flights.urls")),
    path('users/', include("users.urls"))
]
```

users > urls.py

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

```
from . import views
```

```
urlpatterns = [  
    path("", views.index, name="index"),  
    path("login", views.login_view, name="login"),  
    path("logout", views.logout_view, name="logout"),  
]
```


users > views.py

```
from django.http import HttpResponseRedirect
```

```
from django.urls import reverse
```

```
# Create your views here.
```

```
def index(request):
```

```
    if not request.user.is_authenticated:
```

```
        return HttpResponseRedirect(reverse("login"))
```

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

```
    return render(request, "users/login.html")
```

```
def logout_view(request):
```

```
    pass
```

users > templates > users > layout.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Users</title>
  </head>
  <body>
    {% block body %}

    {% endblock %}
  </body>
</html>
```

users > templates > users > login.html

```
{% extends "users/layout.html" %}
```

```
{% block body %}
```

```
    <form action="{% url 'login' %}" method="post">
```

```
        {% csrf_token %}
```

```
        <input type="text" name="username" placeholder="Username">
```

```
        <input type="password" name="password" placeholder="Password">
```

```
        <input type="submit" value="Login">
```

```
    </form>
```

```
{% endblock %}
```

- `python manage.py runserver`
- `http://localhost:8000/admin/`

Django administration

WELCOME, SAIF. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Site administration

AUTHENTICATION AND AUTHORIZATION

Groups	+ Add	✎ Change
Users	+ Add	✎ Change

FLIGHTS

Airports	+ Add	✎ Change
Flights	+ Add	✎ Change
Passengers	+ Add	✎ Change

Recent actions

My actions

✎ ali

User

✎ haider

User

+ haider

User

+ ali

User

✎ Saif Ijaz

Passenger

+ 8: Tokyo (NRT) to Moscow (SVO)

Flight

+ 7: Istanbul (IST) to Moscow (SVO)

Django administration

WELCOME, SAIF. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Site administration

AUTHENTICATION AND AUTHORIZATION

Groups	+ Add	Change
Users	+ Add	Change

FLIGHTS

Airports	+ Add	Change
Flights	+ Add	Change
Passengers	+ Add	Change

Recent actions

My actions

ali

User

haider

User

haider

User

ali

User

Saif Ijaz

Passenger

8: Tokyo (NRT) to Moscow (SVO)

Flight

7: Istanbul (IST) to Moscow (SVO)

Home > Authentication and Authorization > Users > Add user

AUTHENTICATION AND AUTHORIZATION

Groups + Add

Users + Add

FLIGHTS

Airports + Add

Flights + Add

Passengers + Add

Add user

First, enter a username and password. Then, you'll be able to edit more user options.

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:

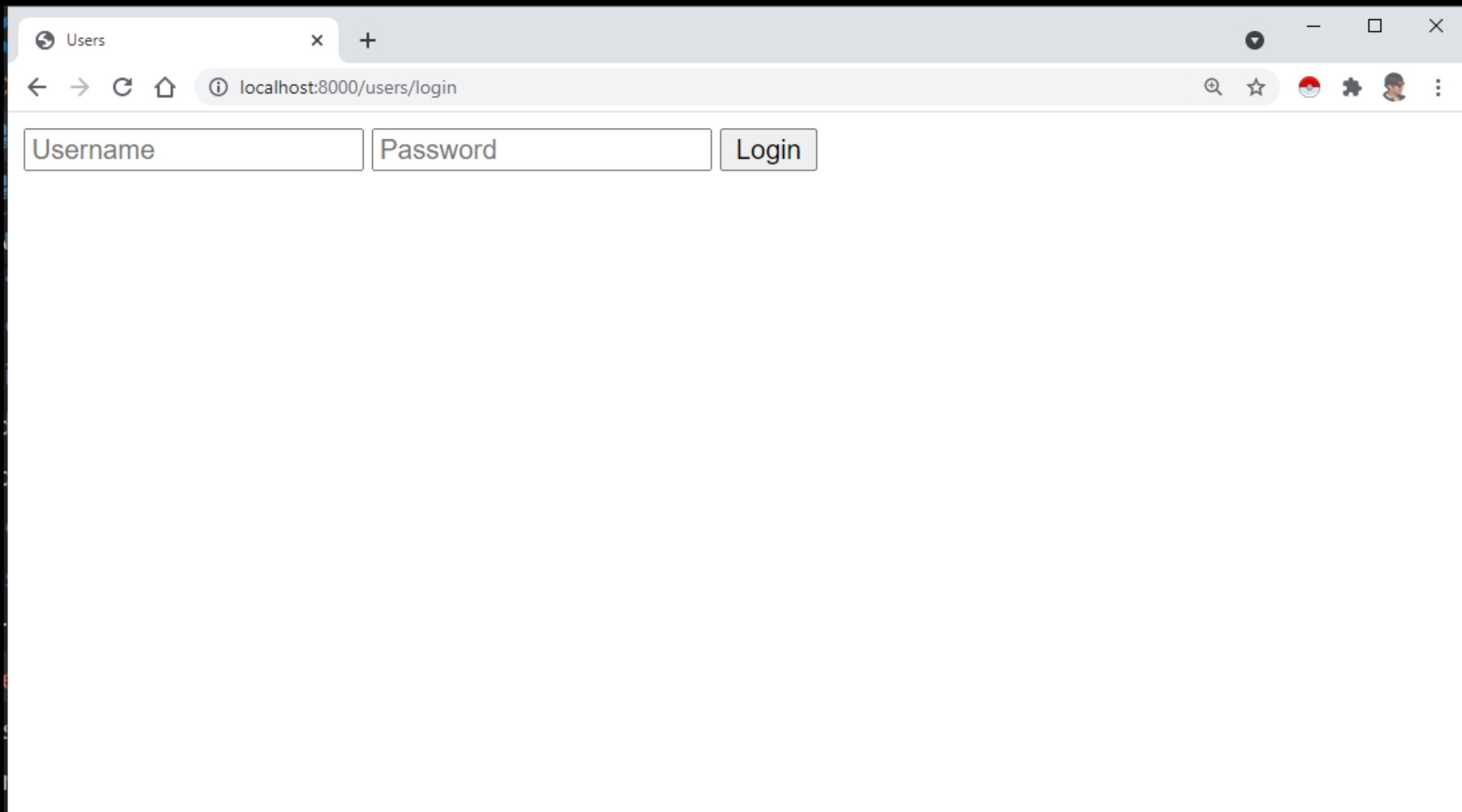
Enter the same password as before, for verification.

Save and add another

Save and continue editing

SAVE

➤ <http://localhost:8000/users/login>



users > views.py

```
def login_view(request):
    if request.method == "POST":
        username = request.POST["username"]
        password = request.POST["password"]
        user=authenticate(request, username=username, password=password)
        if user is not None:
            login(request, user)
            return HttpResponseRedirect(reverse("index"))
        else:
            return render(request, "users/login.html", {
                "message": "Invalid credentials."
            })

    return render(request, "users/login.html")
```

users > templates > users > login.html

```
{% extends "users/layout.html" %}

{% block body %}
    {% if message %}
        <div>{{ message }}</div>
    {% endif %}
    <form action="{% url 'login' %}" method="post">
        {% csrf_token %}
        <input type="text" name="username" placeholder="Username">
        <input type="password" name="password" placeholder="Password">
        <input type="submit" value="Login">
    </form>
{% endblock %}
```

users > views.py

```
# Create your views here.
```

```
def index(request):  
    if not request.user.is_authenticated:  
        return HttpResponseRedirect(reverse("login"))  
    return render(request, "users/user.html")
```

users > templates > users > user.html

```
{% extends "users/layout.html" %}
```

```
{% block body %}
```

```
    <h1>Welcome, {{ request.user.first_name }}</h1>
```

```
    <ul>
```

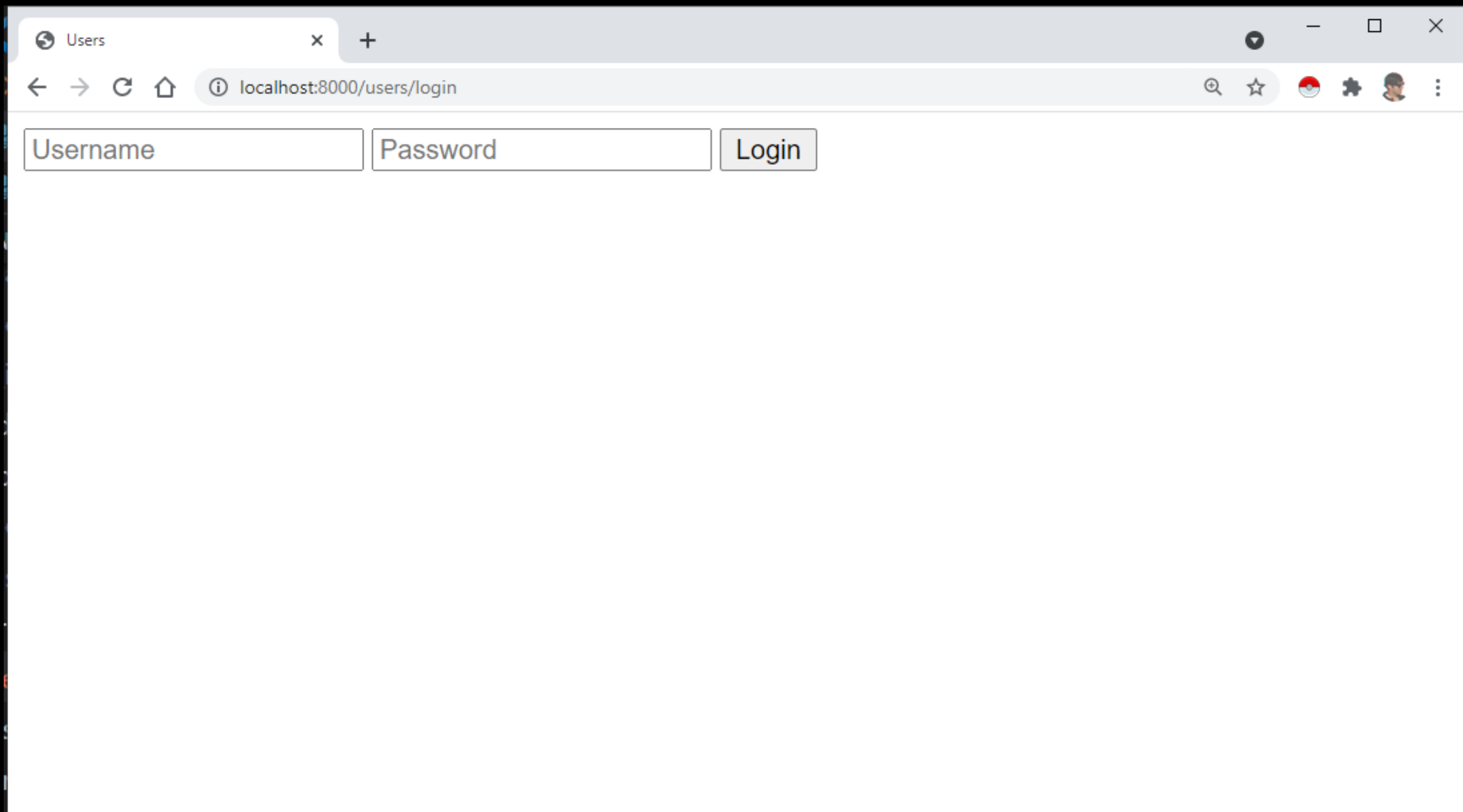
```
        <li>Username: {{ request.user.username }}</li>
```

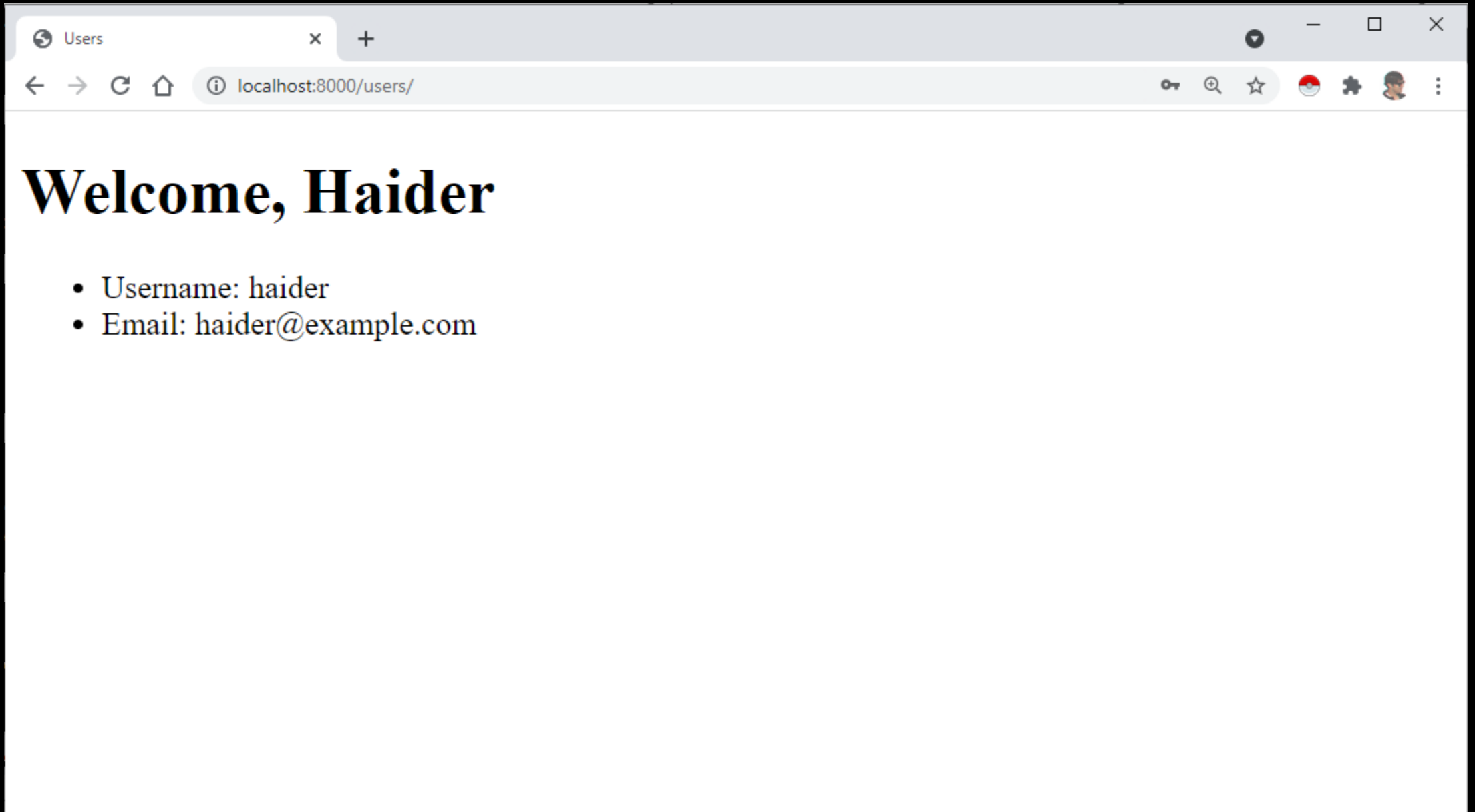
```
        <li>Email: {{ request.user.email }}</li>
```

```
    </ul>
```

```
{% endblock %}
```

➤ <http://localhost:8000/users/login>





Welcome, Haider

- Username: haider
- Email: haider@example.com

users > views.py

```
def logout_view(request):  
    logout(request)  
    return render(request, "users/login.html", {  
        "message": "Logged out."  
    })
```

users > templates > users > user.html

```
{% extends "users/layout.html" %}
```

```
{% block body %}
```

```
    <h1>Welcome, {{ request.user.first_name }}</h1>
```

```
    <ul>
```

```
        <li>Username: {{ request.user.username }}</li>
```

```
        <li>Email: {{ request.user.email }}</li>
```

```
    </ul>
```

```
    <a href="{% url 'logout' %}">Log Out</a>
```

```
{% endblock %}
```