

Advanced Programming with Python

sessions and cookies

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SCHOOL OF
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Plan for today

- Review last day's homework
- HTML Forms
- Sessions and Cookies
- Authentication



Forms in HTML are pieces of the UI which we use to send data from client to server.

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```
<form action="/handle-login" method="POST">
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</form>
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<form action="/handle-login" method="POST">  
    <input type="text" name="username"/>  
  
</form>
```

Forms in HTML are pieces of the UI which we use to send data from client to server.

```
<form action="/handle-login" method="POST">  
    <input type="text" name="username"/>  
    <input type="password" name="password"/>  
  
</form>
```

Forms in HTML are pieces of the UI which we use to send data from client to server.

```
<form action="/handle-login" method="POST">  
  <input type="text" name="username"/>  
  <input type="password" name="password"/>  
  <input type="submit"/>  
</form>
```



Whenever a form is submitted, it will send an HTTP requests to the URL specified in `action`, with the method specified in `method`, and sending the form data in the body of the request

Receiving form data in flask

```
from flask import request

@app.route("/handle-login", method=["POST"])
def handle_login():
    username = request.form["username"]
    password = request.form["password"]

    # Now, do whatever you want with user and password, for ex
    # new session for the user
```



Adding login to our users backoffice

Adding login to our user's backoffice

Let's add login functionality to our user's backoffice!

There's a feature of most web applications that we haven't yet discussed, **sessions**.

Session in the web allow to create sections of websites that are private, for which users need to authenticate in order to access.

Sessions are hold by making HTTP use a special kind of header called cookie.

Cookies are headers that the server sends alongside the HTTP response, that the client **will send back** in subsequent requests!

Whiteboard

Let's whiteboard the whole flow of cookies and sessions

Using sessions in flask

sessions in flask are handled by importing the session object from flask:

```
from flask import request, session
```

```
@app.route("/handle-login", method=["POST"])
```

```
def handle_login():
```

```
    username = request.form["username"]
```

```
    password = request.form["password"]
```

```
    session["username"] = username # this way, we can identify
```



Using sessions in flask

sessions in flask are handled by importing the session object from flask:

```
from flask import session
```

```
@app.route("/")
```

```
def index():
```

```
    if "user_id" in session: # session behaves like a dictionary
```

```
        return render_template("index.html")
```

```
    else:
```

```
        return render_template("login.html")
```

