MSIT

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LESSON MENU

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Module2-Forms and input

Quiz explanation

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moodle2015.msitprogram.net/mod/lesson/view.php?id=1019&pageid=4273

MSIT

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Action attribute

Form HTML

```
<form action="/foo">
  <input ... >
  <input ...>
</form>
```

00:32 01:02

Click here to attempt quiz

NAVIGATION

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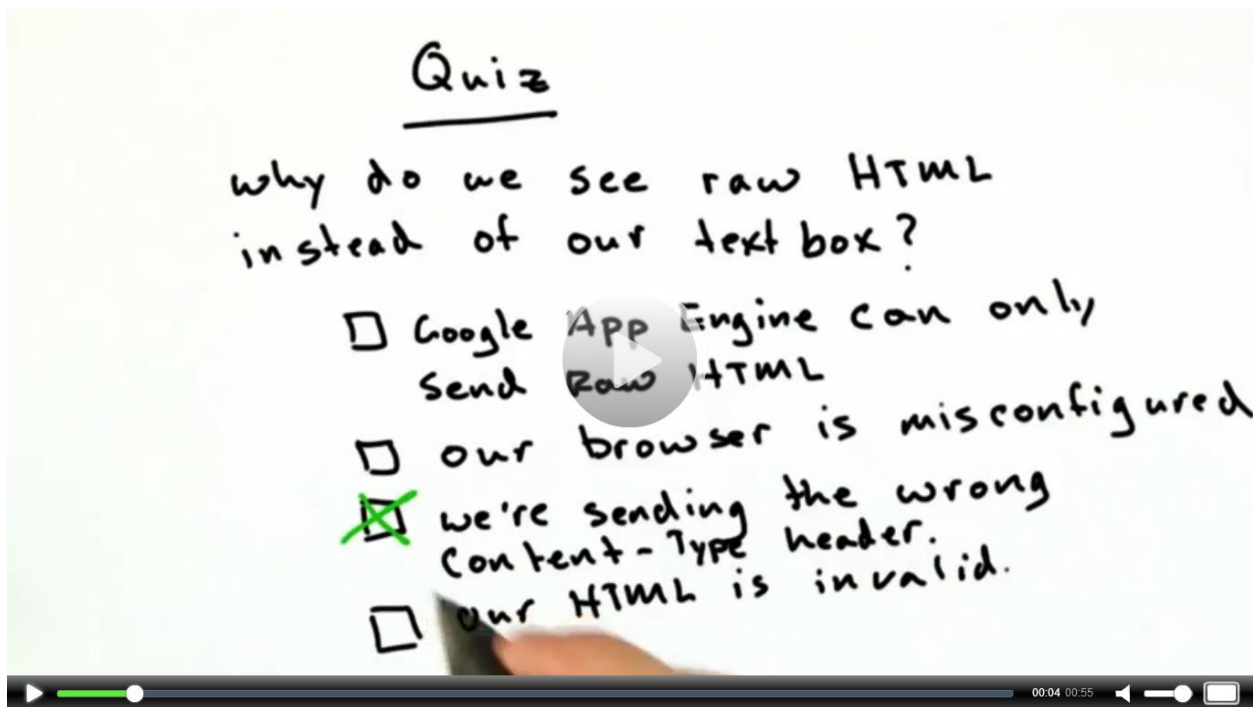
Quiz

Press Esc to exit full screen mode.

Add an action attribute to your
<form> element whose value is
http://www.google.com/search. Click
Submit. what happens?

☐ nothing
☐ the URL changes with what
   we entered
✗ my browser goes to Google search
   results
☐ I've written an entire search

00:05 00:25

Quiz

Press Esc to exit full screen mode.

Type **better flight search** into the form and click Submit. What is the value of the *q* parameter from the URL?

better + flight + search

Quiz

why do we see raw HTML instead of our text box?

- ☐ Google App Engine can only send Raw HTML
- ☐ our browser is misconfigured
- ☒ we're sending the wrong Content-Type header.
- ☐ our HTML is invalid.
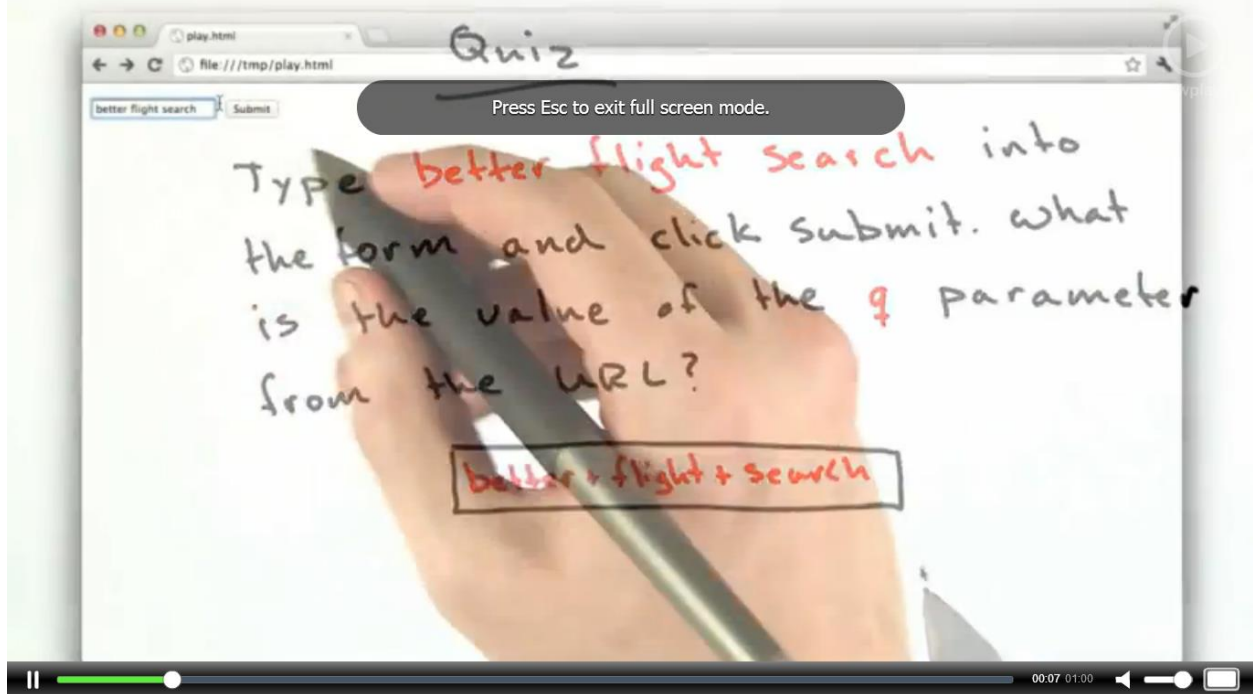
Quiz

What just happened?

- ☐ we see garbage
- ☒ we see the HTTP request
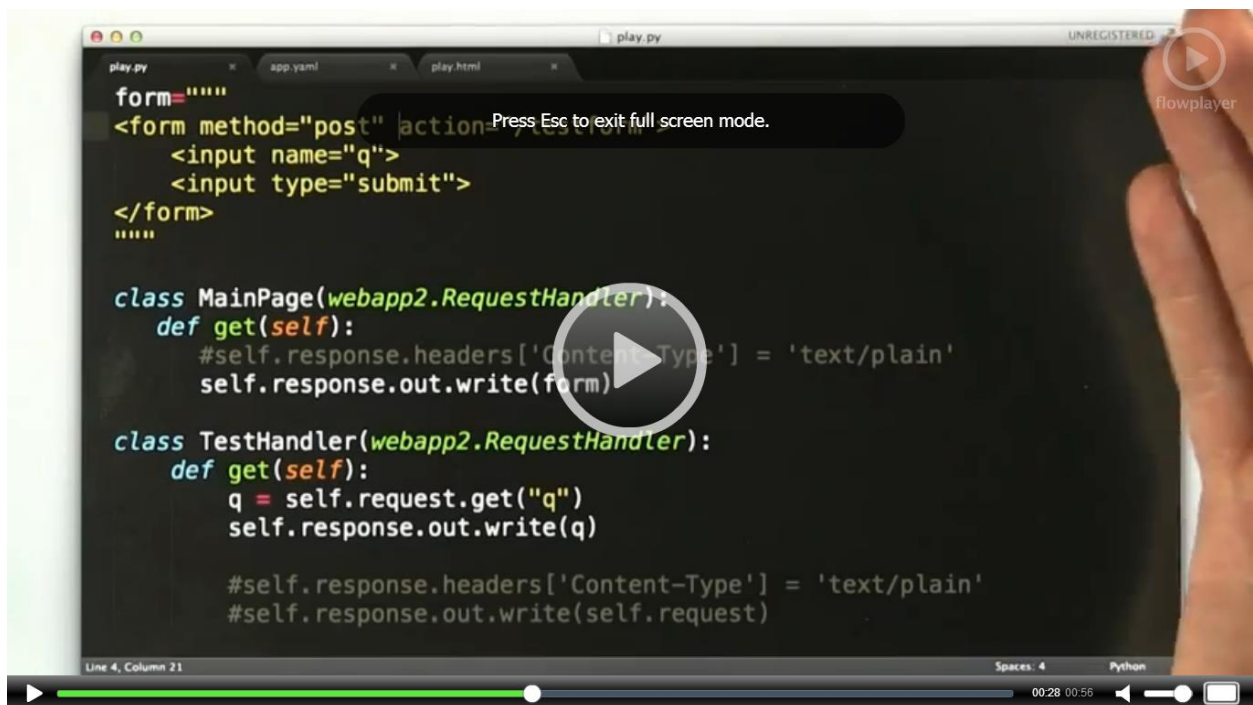- ☐ we see a message from the future
- ☐ nothing changes

```python
form="""
<form method="post" action="/testform">
    <input name="q">
    <input type="submit">
</form>
"""

class MainPage(webapp2.RequestHandler):
    def get(self):
        #self.response.headers['Content-Type'] = 'text/plain'
        self.response.out.write(form)

class TestHandler(webapp2.RequestHandler):
    def get(self):
        q = self.request.get("q")
        self.response.out.write(q)

        #self.response.headers['Content-Type'] = 'text/plain'
        #self.response.out.write(self.request)
```
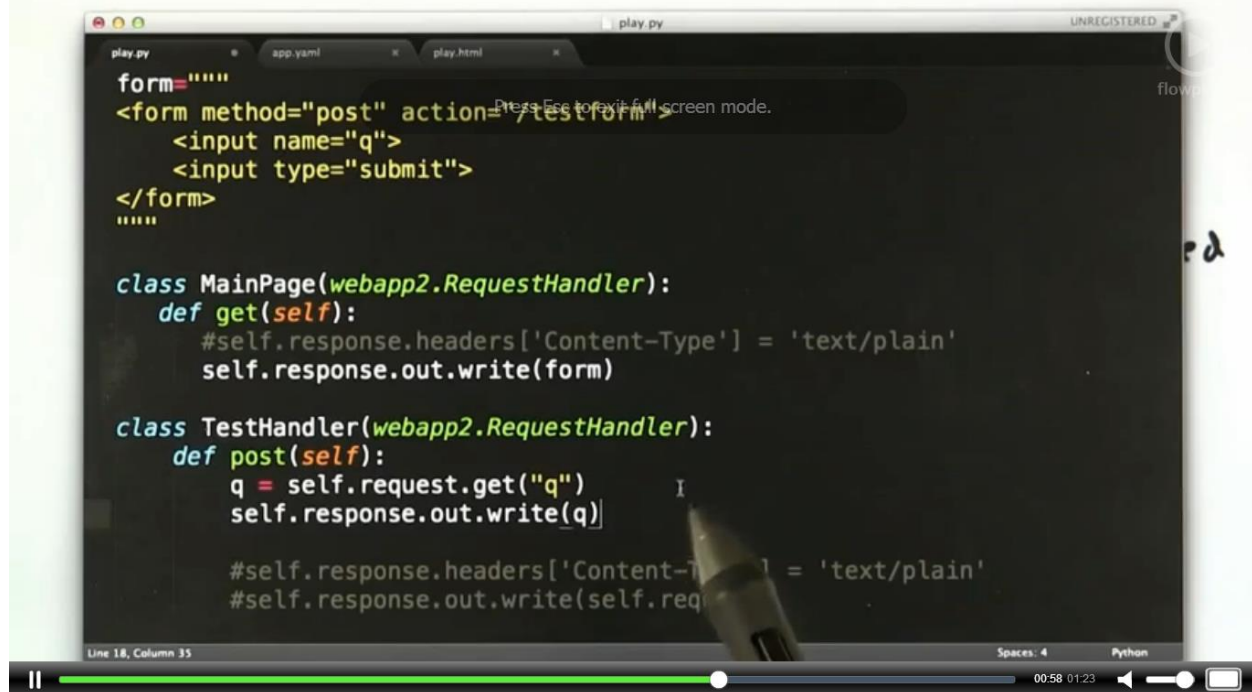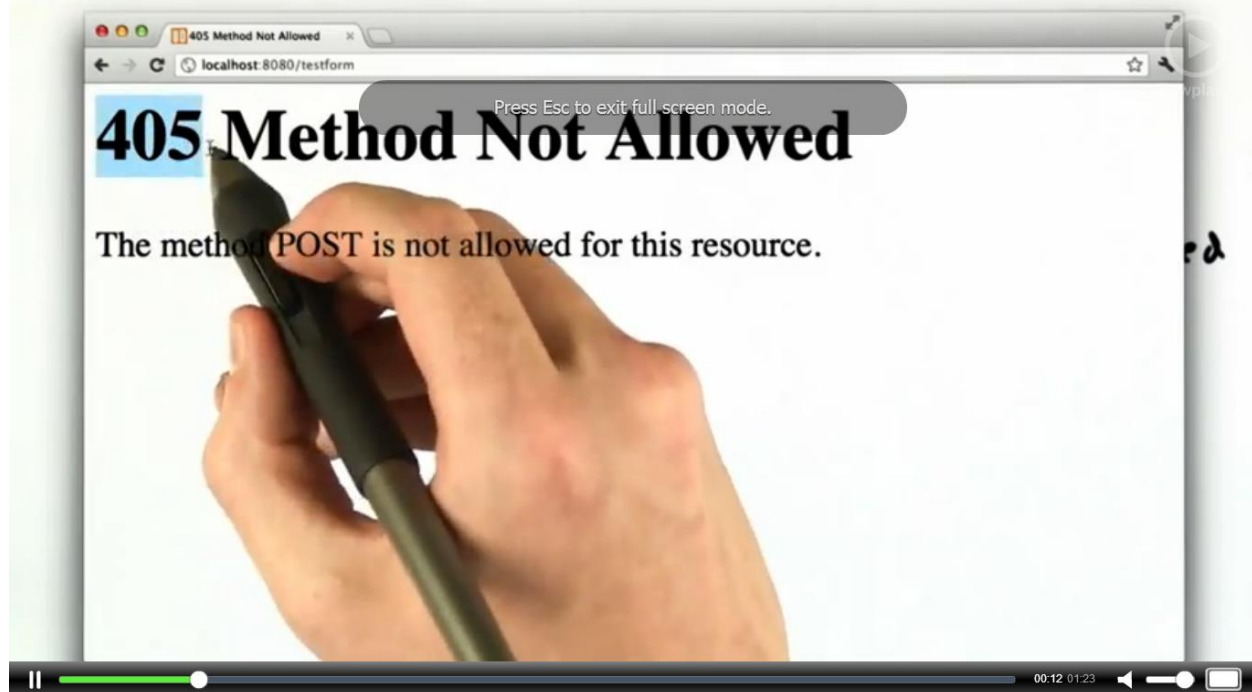
Press Esc to exit full screen mode.

Quiz

what happened?

☐ the text we entered was displayed

☒ an error was displayed

☐ the request headers were displayed

☐ ran a Google search with our request.

00:04 01:23

405 Method Not Allowed

The method POST is not allowed for this resource.

localhost:8080/testform

405 Method Not Allowed

00:12 01:23


```python
form="""
<form method="post" action="/testform">
    <input name="q">
    <input type="submit">
</form>
"""


class MainPage(webapp2.RequestHandler):
    def get(self):
        #self.response.headers['Content-Type'] = 'text/plain'
        self.response.out.write(form)

class TestHandler(webapp2.RequestHandler):
    def post(self):
        q = self.request.get("q")
        self.response.out.write(q)

        #self.response.headers['Content-Type'] = 'text/plain'
        #self.response.out.write(self.req
```

play.py   app.yaml   play.html   play.py   UNREGISTERED

Line 18, Column 35   Spaces: 4   Python

00:58 01:23

Quiz

where did our q parameter
go? (hint: look at the request)

☐ in the url
☒ after the HTTP request
   headers
☐ in a second request
☐ in the HTTP request headers

00:07 01:18

Get include parameter in the url

Post include data

GET vs. POST

GET

- parameters in URL
- used for fetching documents
- maximum URL length
- ok to cache
- shouldn't change the server

POST

- parameters in body
- used for updating data
- no max length
- not ok to cache
- ok to change the server

02:29 02:30

Quiz

Which of these are appropriate for GET requests?

- ☒ fetching a document
- ☐ updating data
- ☒ requests that can be cached
- ☐ sending a lot of data to the server

00:08 00:24

Quiz

when we submit this form, what is the value of the q parameter in the URL?

- ☒ whatever I typed in the box
- ☐ the parameter won't appear at all
- ☐ hunter2

00:08 00:47

Password

Quiz

what is the value of the q parameter when I submit the form with the checkbox unchecked?

- ☐ off
- ☒ the parameter doesn't appear at all
- ☐ the parameter is blank
- ☐ hunter2

00:06 00:43

Quiz

when I select the first two
checkboxes and click submit,
what does the query section of
the URL look like?

$q = on \& r = on$

00:05 00:25

Quiz

which of these yields the "group"
behavior from the radio buttons?

☐ give them all the same id
☒ give them all the same name
☐ give them all the same group
☐ include the \<input\>s in a
   a \<group\> element

00:00

00:03 01:35

Quiz

What is the value of the
q parameter when the form
is submitted with the second
button selected?

two

00:03 00:49

```html
<form>
    <label>
        One
        <input type="radio" name="q" value="one">
    </label>

    <label>
        Two
        <input type="radio" name="q" value="two">
    </label>

    <label>
        Three
        <input type="radio" name="q" value="three">
    </label>

    <br>
    <input type="submit">
</form>
```
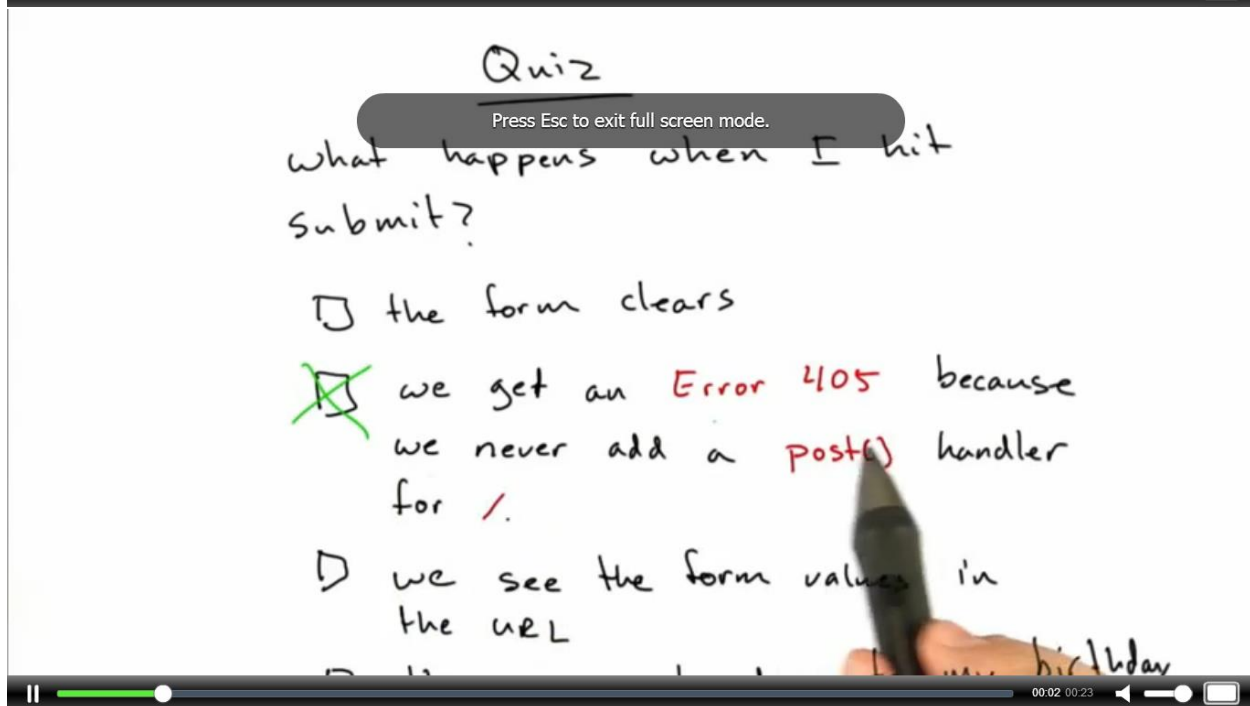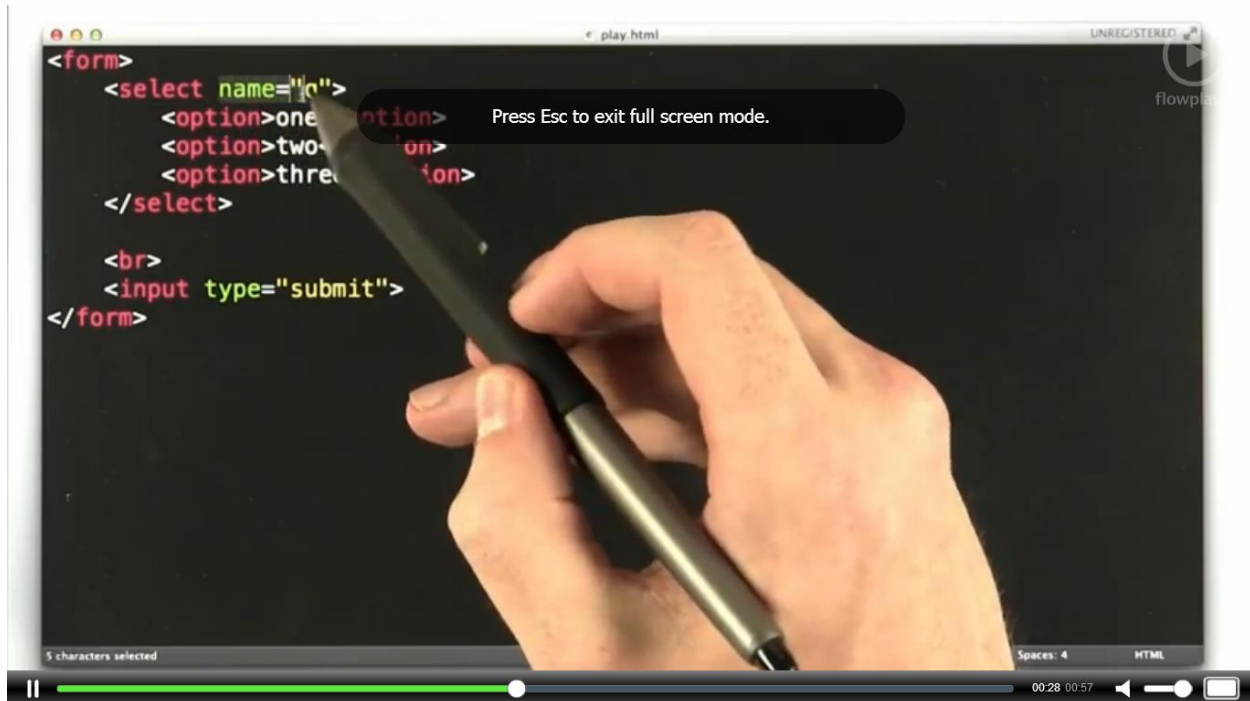
play.html   UNREGISTERED

flowplay

Line 16, Column 5   Spaces: 4   HTML

00:48 01:21

```
<form>
    <select name="q">
        <option>one</option>
        <option>two</option>
        <option>three</option>
    </select>

    <br>
    <input type="submit">
</form>
```

5 characters selected   Spaces: 4   HTML

Quiz

what happens when I hit
submit?

☐ the form clears

☒ we get an Error 405 because
   we never add a Post() handler
   for /.

☐ we see the form values in
   the URL

Quiz

When we select **two** from the drop down, what is the value of the q parameter?

two

"/ "does not allow to post function

Quiz

What are some possible solutions
to users entering bad data
into our form?

- ☒ use dropdowns to limit what
  the user can actually enter
- ☐ assume the users will only
  enter good data
- ☒ verify what the users enter and
  complain if the data is bad

Quiz

which of these is a correct
`<input>` for preserving the user's
month?

- ☐ `<input value="%(month)s">`
- ☐ `<input name="month"> %(month)s </input>`
- ☐ `<input name="month">`
- ☒ `<input name="month" value="%(month)s">`

Quiz

what will happen when I click submit?

- ☐ we see an error message, and our input is in the form
- ☒ we see an error message, but the quote messes up our HTML
- ☐ There's an error on the server side
- ☐ The page renders blank

Escaping

`<input value="%(month)s">`

| november |

`<input value="foo"> derp ">`

| foo | "> derp

month = "november"

month = `foo "> derp`

```
"  -> &quot;
>  -> &gt;
<  -> &lt;
&  -> &amp;
```

Quiz

what is the correct way to include the text &=& in rendered HTML?

&=&amp;

&.= & amp;

Implement the function escape_html(s), which replaces

all instances of:

> with >

< with <

" with "

& with &

and returns the escaped string

Note that your browser will probably automatically

render your escaped text as the corresponding symbols,

but the grading script will still correctly evaluate it.

#

def escape_html(s):

```
# print escape_html('>')
# print escape_html('<')
# print escape_html('"')
# print escape_html("&")
```
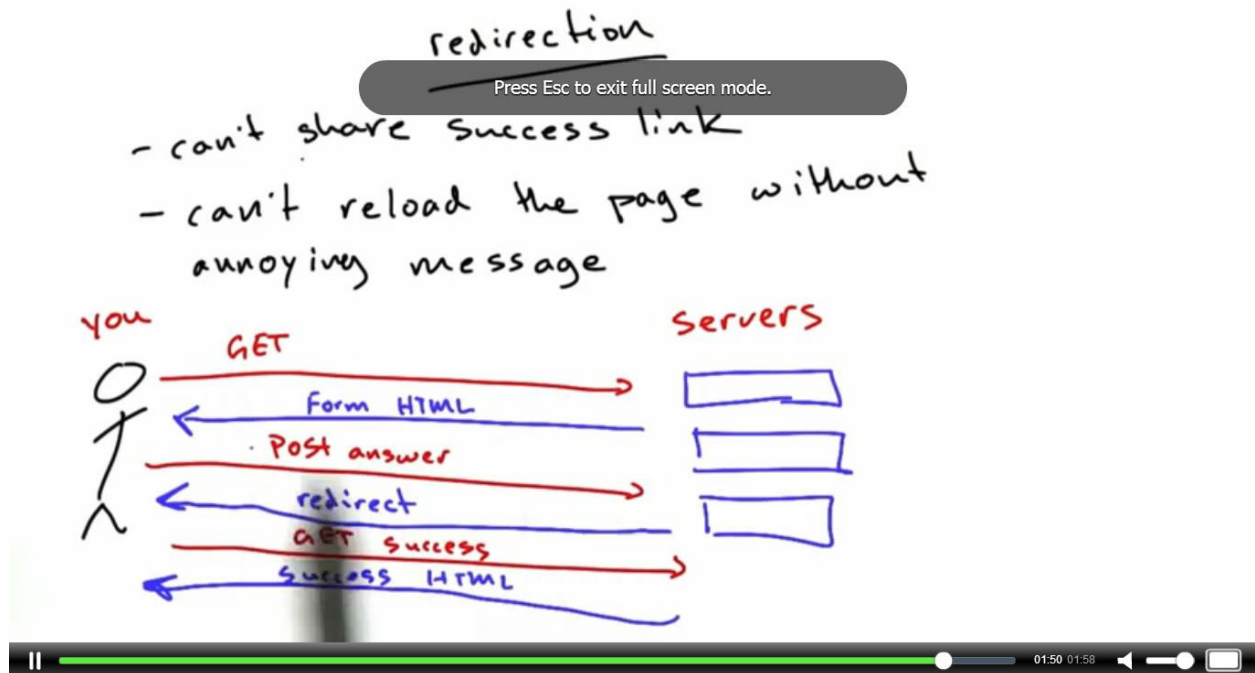
```
 1  # implement the function escape_html(), which replaces:
 2  # > to &gt;
 3  # < to &lt;
 4  # " to &quot;
 5  # & to &amp;
 6  # and returns the escaped string
 7
 8  def escape_html(s):
 9      for (i, o) in (("&", "&amp;"),
10                     (">", "&gt;"),
11                     ("<", "&lt;"),
12                     ('"', "&quote;")):
13          s = s.replace(i, o)
14      return s
15
16  print escape_html("test")
```

RUN

test

II   00:16 02:25

---

redirection

- can't share success link
- can't reload the page without annoying message

you   Servers

GET →

← Form HTML

POST answer →

← redirect

GET success →

← Success HTML

II   01:50 01:58

Quiz

Why is it nice to redirect after a form submission?

- ☐ because POSTs can't return HTML
- ☒ so that reloading the page doesn't resubmit the form
- ☐ to remove the form parameters from the URL
- ☒ so we can have distinct pages