ECS 89

5/14

Announcements

- Checkpoint on Proj3 due tonight
- This should encourage you to work through tutorial, set up a form in Django
- Goal should be something like this:

Pedometer System User Registration

User ID [amen]   How do you get to school? [walk ⇕] [Submit]

- Data should be entered into User database table

Pedometer data entry – use it!

Enter your pedometer data:

Steps: [   ]
User ID: [   ]
Month: [   ]
Day: [   ]
[Submit]

pc110.cs.ucdavis.edu:10002/hw2/index.html

Permissions tip

- Django usually gives informative error messages.
- If you get 505 server errors, chances are something does not have the right permission.
- Try going to /var/www/yourname and:

  chmod 770 –R mysite

- This sets permission on everything in mysite to rwxrwx---

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mysite/mysite/urls.py issues

url(r'^newpolls/', include('newpolls.urls'),
    …

- include() is a django function that apparently grabs the code from mysite/newpolls/urls.py and sticks it here.
- This leads to entertaining behavior.
- Errors in mysite/newpolls/urls.py produce error messages that look like the error is in this line.

.pyc files

- These are faster versions of your Python code, created whenever a module is called. Usually we ignore them.
- They get run instead of the original code, and are automatically recreated every time you change your program .py file.

- Changing mysite/newpolls/urls.py means that mysite/mysite/urls.pyc should be recomputed, but Python does not figure that out.
- App still acts like old code.
- Fix:

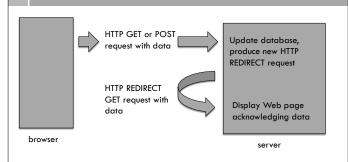   touch mysite/mysite/urls.py

- touch is a Unix command that says "treat the file as if it had just been changed"

Problem reloading vote count page

- Re-counts the new votes.
- How to fix?
- Separate the action of updating the database from the action of displaying the Web page
- Generate new HTTP request after counting the votes, use that to get to Web page for display.
- Always do this when performing operations that are not idempotent (means "same result no matter how many times you do it")

POST REDIRECT GET

Do we need to do this for UID insertion, in the assignment?

Adding a user vs counting a vote

- If two people cast the same vote, it should get counted twice.
- If two people add the same user, the user should only be added once.
- Reloading the page is just like trying to add the user a second time.
- Either way, the function that adds the user should check to see if the user is already in the database, and NOT add them a second time.
- This makes the function idempotent.

Add URL for database update

...
 # matches /newpolls/countVote/
 url(r'^countvote/?$', views.countvote, name='countvote'),

- In mysite/newpolls/urls.py
- To get there, change templates/newpolls/details.html

...
<form action="/django/newpolls/countvote" method="get">

Changes in views.py

- Split the database change and the HTML generation into two functions
- Generate a HTTP REDIRECT request to get from one to the other.
- REDIRECT goes directly to some other URL

```
from django.http import HttpResponse,HttpResponseRedirect
…
def countvote(request):
    p = Poll.objects.get(id=1)
    try:
        choiceFromGet = request.GET['choice']
…
 else:
        selected_choice.votes += 1
        selected_choice.save()
        return HttpResponseRedirect('vote?choice='+choiceFromGet)
```

Lots of things use REDIRECT

☐ When a Web page is moved

☐ URL shortening, eg. https://bitly.com/ or http://tinyurl.com/