

CMPSCI 120 Fall 2008
Lab #5
Professor William T. Verts

Setting Up

Go to the class site and download to a folder on your computer the file called **Burgers.zip**, then unpack its contents into the same folder. There is a single Python program called **burgers.py** stored inside.

Logging in and Renaming Files

Using PuTTY as you did in the previous assignments, log in to the UNIX server. Change into the `public_html` directory and create a new folder called `cgi-bin`, setting its permissions as shown below:

1. `cd public_html` (Change into the Web nest)
2. `mkdir cgi-bin` (Create a folder for scripts)
3. `chmod a+rx cgi-bin` (Set permissions)
4. `ls -al` (View the files)

At this point you should see two files inside `public_html`, one called `cmpsci120` and the other called `cgi-bin`, both with the permissions set to `rwxr-xr-x`. The folder `cgi-bin` is a folder with a special name where we will store the `burgers.py` file.

Moving and Editing the Script

Using WinSCP as you did in the previous assignment, copy the `burgers.py` file into the `public_html/cgi-bin` folder of your UNIX account on the `elsrv3` server. Set the permissions to `rwxr-xr-x` on the `burgers.py` file to make it runnable (do this from inside WinSCP).

Using PuTTY, log into your UNIX account and then change into the `public_html/cgi-bin` folder. Using emacs, edit the `burgers.py` file to replace the two occurrences of Dr. Bill's with your own name (one is in the `<TITLE>...</TITLE>` line and the other is in the `<H1>...</H1>` line). Be very careful to NOT modify any other text in the Python program, and don't change any of the prices! When you are done editing the text, exit emacs with `Ctrl`×`Ctrl`c.

For reference, the text of the script is shown starting on the next page. The parts you are to change are underlined.

```

#!/usr/bin/python

#-----
# (C) May 12, 2008 -- Dr. William T. Verts
#-----

import cgi
form = cgi.FieldStorage()

#-----

print "Content-type: text/html\n"
print ""
print "<HTML>"
print "    <HEAD>"
print "        <TITLE>Dr. Bill's On-Line Restaurant</TITLE>"
print "    </HEAD>"
print ""
print '    <BODY BGCOLOR="#00FFFF">'
print "        <H1>Dr. Bill's Restaurant</H1>"

#-----

Total = 0

if form.has_key("Sandwich"):
    Sandwich = form["Sandwich"].value.upper()
    Price = 0
    if (Sandwich == "HAMBURGER"):
        Price = 0.99
    if (Sandwich == "CHICKENBURGER"):
        Price = 1.29
    if (Sandwich == "FISHBURGER"):
        Price = 1.79
    print "<B>" + Sandwich + "</B> = $" + str(Price) + "<BR>"
    Total = Total + Price

if form.has_key("Cheese"):
    Price = 0.25
    print "Cheese = $" + str(Price) + "<BR>"
    Total = Total + Price

if form.has_key("Guacamole"):
    Price = 0.40
    print "Guacamole = $" + str(Price) + "<BR>"
    Total = Total + Price

if form.has_key("Lettuce"):
    print "Lettuce<BR>"

if form.has_key("Tomatoes"):
    print "Tomatoes<BR>"

if form.has_key("Pickles"):
    print "Pickles<BR>"

if form.has_key("Onions"):

```

```

    print "Onions<BR>"

if form.has_key("Mustard"):
    print "Mustard<BR>"

if form.has_key("Ketchup"):
    print "Ketchup<BR>"

if form.has_key("Drink"):
    Drink = form["Drink"].value.upper()
    Price = 0
    if Drink == "COLA":
        Price = 0.79
    if Drink == "TEA":
        Price = 1.19
    if Drink == "COFFEE":
        Price = 1.29
    print "<B>" + Drink + "</B> = $" + str(Price) + "<BR>"
    Total = Total + Price

if form.has_key("Extra"):
    Extra = form["Extra"].value.upper()
    Price = 0
    if Extra == "FRIES":
        Price = 0.59
    if Extra == "ONION RINGS":
        Price = 0.99
    if Extra == "COLE SLAW":
        Price = 0.49
    if Extra == "SALAD":
        Price = 1.29
    print "<B>" + Extra + "</B> = $" + str(Price) + "<BR>"
    Total = Total + Price

#-----

print "    <BR>"
print "    <B>YOUR TOTAL IS $" + str(Total) + "</B><BR>"
print "    </BODY>"
print "</HTML>"

```

Adding the Form Code to Default.html

In the previous assignment we created a page called `Default.html`, which contained the code from earlier assignments. Change into the `cmpsci120` page and start to edit the page with `emacs`.

Edit the existing code to insert a `
` tag between the “Welcome” text and the button you created in an earlier assignment that pointed to Dr. Bill’s Page. When viewed, the page will now show the text and the button centered on separate lines.

Position the insertion point just above the `</BODY>` tag in the existing page and hit `[Enter←]` a couple of times to open up some space (do not delete any previous code). Type in the following code, exactly as you see it here, except that you must replace the blank in the `FORM` tag with your username and the blank in the `<H1>` tag with your name:

```
<FORM METHOD="POST"
ACTION="http://elsrv3.cs.umass.edu/~_____/cgi-bin/burgers.py">
  <INPUT TYPE="reset" VALUE="Reset All">
  <INPUT TYPE="submit" VALUE="Submit Your Order"><BR>

  <H1>_____ 's On-Line Restaurant</H1>

  <TABLE BORDER>
    <TR>
      <TD VALIGN="TOP">
        <H2>Sandwich</H2>
        <INPUT TYPE="radio" NAME="Sandwich"
          VALUE="Hamburger" CHECKED>Hamburger<BR>
        <INPUT TYPE="radio" NAME="Sandwich"
          VALUE="Chickenburger">Chickenburger<BR>
        <INPUT TYPE="radio" NAME="Sandwich"
          VALUE="Fishburger">Fishburger<BR>
      </TD>
      <TD VALIGN="TOP">
        <H2>Extras</H2>
        <INPUT TYPE="checkbox" NAME="Cheese" >Cheese (Extra)<BR>
        <INPUT TYPE="checkbox" NAME="Guacamole">Guacamole (Extra)<BR>
        <INPUT TYPE="checkbox" NAME="Lettuce" >Lettuce<BR>
        <INPUT TYPE="checkbox" NAME="Tomatoes" >Tomatoes<BR>
        <INPUT TYPE="checkbox" NAME="Pickles" >Pickles<BR>
        <INPUT TYPE="checkbox" NAME="Onions" >Onions<BR>
        <INPUT TYPE="checkbox" NAME="Mustard" >Mustard<BR>
        <INPUT TYPE="checkbox" NAME="Ketchup" >Ketchup<BR>
      </TD>
      <TD VALIGN="TOP">
        <H2>Drink</H2>
        <INPUT TYPE="radio" NAME="Drink"
          VALUE="Water" CHECKED>Water (Free)<BR>
        <INPUT TYPE="radio" NAME="Drink"
          VALUE="Cola">Cola<BR>
        <INPUT TYPE="radio" NAME="Drink"
          VALUE="Tea">Iced Tea<BR>
        <INPUT TYPE="radio" NAME="Drink"
          VALUE="Coffee">Coffee<BR>
      </TD>
      <TD VALIGN="TOP">
        <H2>Side</H2>
        <INPUT TYPE="radio" NAME="Extra"
          VALUE="Fries" CHECKED>Fries<BR>
        <INPUT TYPE="radio" NAME="Extra"
          VALUE="Onions" >Onions<BR>
      </TD>
    </TR>
  </TABLE>
</FORM>
```

```

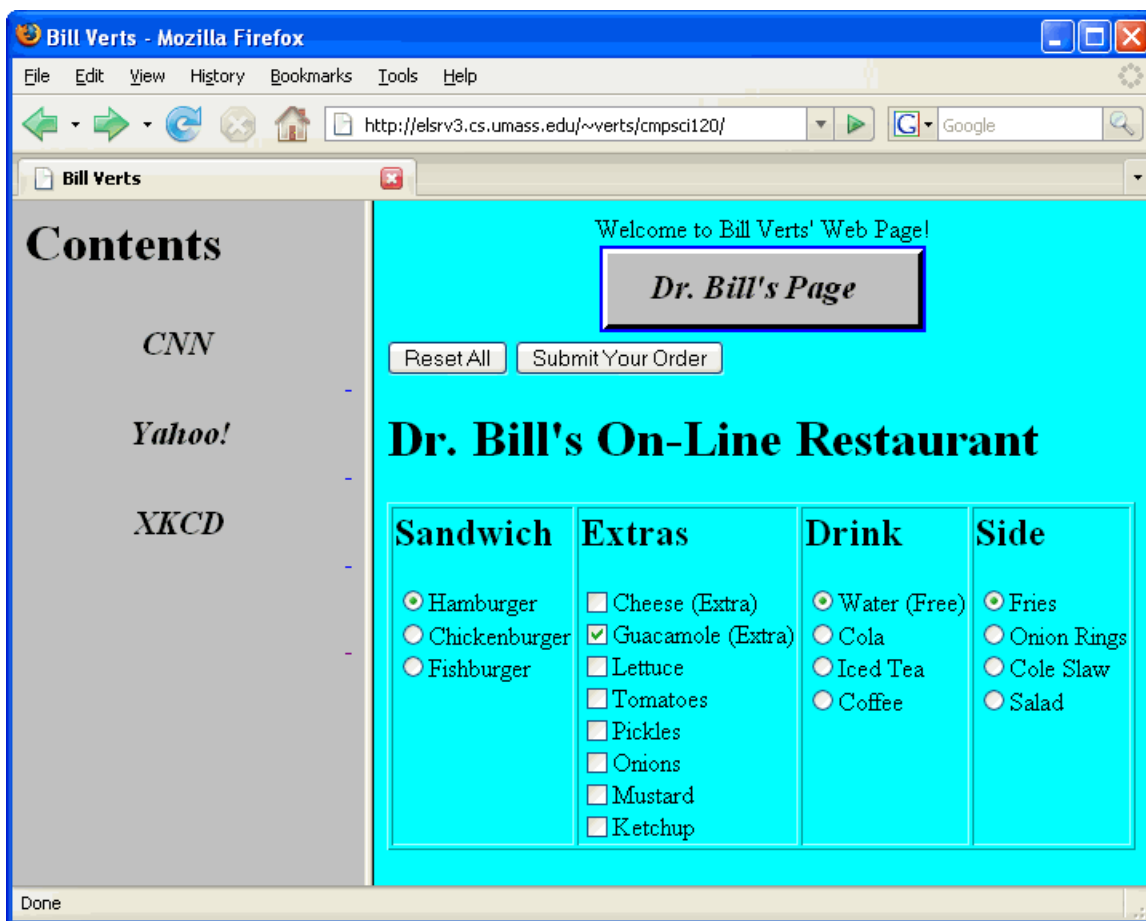
        VALUE="Onion Rings" >Onion Rings<BR>
<INPUT TYPE="radio" NAME="Extra"
VALUE="Cole Slaw">Cole Slaw<BR>
<INPUT TYPE="radio" NAME="Extra"
VALUE="Salad">Salad<BR>
</TD>
</TR>
</TABLE>
</FORM>

```

Save your changes and exit emacs with `Ctrl)xCtrl)c`.

Testing

Point your browser at your regular home page. With all the changes, the appearance should be as in the following screen (Guacamole would not be checked as shown here):



When you select any of the given options and click the Submit Your Order button, you should get a response screen.

NOTE: You MUST try this from an on-campus browser. We do not have permission to run scripts from off-campus!

Here is a correct response screen:



If You Get Stuck

If you miss any of the instructions, you may need to go back and fix certain things. Possible problems include omitting certain file permissions, or copying files into the wrong place. Please email me or the TAs if you need help.

If you cannot get your Python script to run, use mine temporarily by changing the ACTION= section of the FORM tag to use my username instead of yours. This will help you debug your HTML code.

What To Turn In

When your pages are correct and visible on the Web, send an email message to **both** the TAs **and** to the **literacy@cs.umass.edu** account. The subject line must be set to the exact phrase **CMPSCI 120 ASSIGNMENT #5** and the body of the message must contain your name, your username, and your fully specified URL.