

## Worksheet 9: CGI

### Writing Perl CGI Scripts to Process Forms

For this exercise, you will create a form in your own www directory which uses a Perl CGI (Common Gateway Interface) script to process it. Because CGI scripts can cause security problems, they must:

- All live in the same directory (/usr/local/www/cgi-bin/csci11 for this class).
- Will only be accessible from computers on campus.
- Will only be executable for about a week.

1. The first thing you should do is create an HTML form. There is an example form which you can copy in one of two ways:

```
-> cp ~/jcool/www/index.html index.html
```

This will name it index.html in your directory, but you can name it whatever you want. You can also get to it by its URL:

```
http://www.cs.williams.edu/~jcool/index.html
```

and then view source (under the View menu), then type command-A to highlight all the source, then command-c to copy it, then go to a terminal window with an editor open and past it into a file. This is a useful way to steal the code from any form you can get to on the web, however much HTML is automatically generated and difficult to read. (For example, try viewing the source of Google's home page which one might expect to be pretty simple.)

Look over the form and the web page it produces and note what commands are used for creating various parts of the form. An HTML form must start with the FORM tag and must say what script to use, for example:

```
<form action="http://bovine.cs.williams.edu/csc111/post.cgi" method="POST">
```

This line says to use the post.cgi script at the above URL to process the form.

2. Next, copy the Perl source code of the CGI script to your directory, but name it with your userid. If jcool is your userid, you would name it this way:

```
cp /usr/local/www/cgi-bin/csc111/post.cgi jcool_post.cgi
```

Look at this source code. Try modifying it and copying it back to the cgi-bin/csci11 directory and running it again. Don't forget that you'll have to change the name of the script in the HTML source code as well from post.cgi. Alternatively, you can create a symbolic link in your directory to the real file in the cgi directory. To do this, make sure the file is in the csci11 directory, remove your local copy, then type the following (if jcool is your userid):

```
ln -s /usr/local/www/cgi-bin/csc111/jcool_post.cgi jcool_post.cgi
```

Now, when you edit jcool\_post.cgi in your www directory, it will actually be editing the one in the real CGI directory.