Some Real Work

In this lesson, we will develop some of our shell functions and get our script to produce some useful information.

show_uptime

The show_uptime function will display the output of the **uptime** command. The uptime command outputs several interesting facts about the system, including the length of time the system has been "up" (running) since its last re-boot, the number of users and recent system load.

```
[me@linuxbox me]$ uptime
9:15pm up 2 days, 2:32, 2 users, load average: 0.00, 0.00,
0.00
```

To get the output of the uptime command into our HTML page, we will code our shell function like this, replacing our temporary stubbing code with the finished

version:

```
show_uptime()
{
    echo "<h2>System uptime</h2>"
    echo "<pre>"
    uptime
    echo "</pre>"
}
```

As you can see, this function outputs a stream of text containing a mixture of HTML tags and command output. When the command substitution takes place in the main body of the our program, the output from our function becomes part of the here script.

drive_space

The drive_space function will use the **df** command to provide a summary of the space used by all of the mounted file systems.

```
[me@linuxbox me]$ df
```

```
Filesystem     1k-blocks        Used Available Use% Mounted on

/dev/hda2        509992      225772     279080  45% /
/dev/hda1         23324        1796      21288   8% /boot
/dev/hda3      15739176     1748176   13832360  12% /home
/dev/hda5       3123888     3039584      52820  99% /usr
```

In terms of structure, the drive_space function is very similar to the show_uptime function:

```
drive_space()
{
    echo "<h2>Filesystem space</h2>"
    echo "<pre>"
    df
    echo "</pre>"
}
```

home_space

The home_space function will display the amount of space each user is using in his/her home directory. It will display this as a list, sorted in descending order by the

amount of space used.

```
home_space()
{
    echo "<h2>Home directory space by user</h2>"
    echo "<pre>"
    echo "Bytes Directory"
    du -s /home/* | sort -nr
    echo "</pre>"
}
```

Note that in order for this function to successfully execute, the script must be run by the superuser, since the **du** command requires superuser privileges to examine the contents of the /home directory.

system_info

We're not ready to finish the system_info function yet. In the meantime, we will improve the stubbing code so it produces valid HTML:

```
system_info()
{
```

```
        echo "<h2>System release info</h2>"
        echo "<p>Function not yet implemented</p>"
}
```

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