91.516 OPERATING SYSTEMS I, SPRING 2006 PROGRAM SUBMISSION COVER SHEET

This cover sheet must be completely filled out and attached to the top of all your hardcopy homework submissions. Homework submissions which do not include this page as the cover page will not be accepted for grading.

Assignment number: Semester project
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Submission Date: Thursday, 18 May, 2006

SOURCE FILE NAMES AND LOCATIONS:

http://www.thibault.org/91.516/hw/packos.tar.gz

The tarfile contains a directory named packos. To build PackOS, extract the tarfile and do:

```
cd packos
make depend
make
```

There are sample programs in packos/samples/. Some of these (simple, tcp, and timer) are standalone, and can be run by doing (e.g.):

```
cd samples/simple
./sample-simple
```

The programs in samples/file and samples/httpd are more complex, requiring two external processes to be running, one of which requires root permissions (in order to establish a virtual network interface with Linux's tun device). To launch the HTTP server, do:

In terminal A:
```
cd samples/httpd
./sample-httpd
```
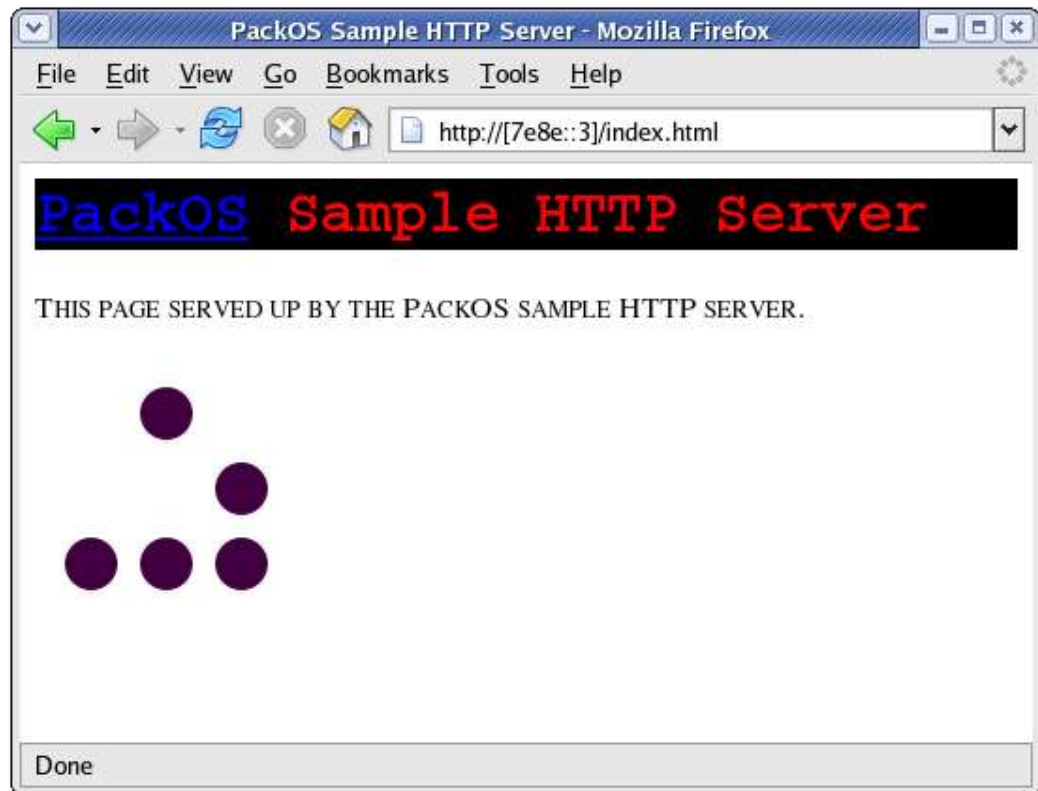
In terminal B:
```
cd aux/dumbfs-outside
./dumbfs-outside
```

In terminal C:

```
su
cd aux/iface-shm-outside
./iface-shm-outside
```

Now, from an IPv6-capable Web browser, running on the same machine, you can read http://[7e8e::3]/index.html. This will show you a page that looks like:

Note that the image will show up only if your browser supports SVG with the <embed> tag. At this time, the only browser I know of that fits this description out of the box is Firefox 1.5.

EXPLAIN HOW MUCH OF THIS PROBLEM YOU FEEL YOU COMPLETED CORRECTLY IN THIS SUBMISSION AND, SPECIFICALLY, WHAT'S NOT WORKING.

I have completed nearly everything that I committed to in my proposal. This only exception is that there is a bug in the TCP implementation, as described in the attached writeup, which means that the HTTP server cannot serve pages larger than about 1300 bytes.