CS320 Web and Internet Programming
Linux Basics

Chengyu Sun
California State University, Los Angeles

Directory Structure

◈ root directory /
◈ current directory .
◈ Parent directory . .
◈ home directory ~

Moving Around

◈ `cd` /absolute/path
◈ `cd` relative/path
◈ `cd`

Directory and File Commands

◈ Find current directory: pwd
◈ List directory content: ls
  ▪ list all files -a
  ▪ list files in long format –l
◈ Copy files
  ▪ cp file1 file2
  ▪ cp file1 file2 dir
◈ Move/rename file
  ▪ mv file1 file2
  ▪ mv file1 file2 dir

Some Useful Commands

◈ Reference the manual pages
  ▪ man <command>
◈ Create command aliases
  ▪ alias dir="ls –lX"
◈ Update the timestamp of a file
  ▪ touch <filename>
  ▪ "touch" `web.xml` will trigger Tomcat to reload your application

Choices of Editors

◈ Console
  ▪ vi, vim
  ▪ emacs
  ▪ pico

◈ With X Forwarding
  ▪ gvim
  ▪ xemacs
  ▪ gedit
  ▪ IDEs
    ◆ Netbeans
    ◆ Eclipse
    ◆ KDevelop

File Permissions

❖ Three categories of users:
  ■ owner, group, other
❖ Three privileges
  ■ read, write, execute

File Permission Example

```
-rw-------   1 cs320stu31 cs320stu31    116 Sep 24 14:53 .mysql_history
drwx------   2 cs320stu31 cs320stu31   4096 Sep 24 14:43 .ssh
-rw-------   1 cs320stu31 cs320stu31    790 Sep 24 14:52 .viminfo
-rw-------   1 cs320stu31 cs320stu31     63 Sep 28 10:09 .Xauthority
drwxr-xr-x   2 cs320stu31 cs320stu31   4096 Sep 24 14:32 .xemacs
```

Change File Permissions

❖ chmod

.bashrc

❖ Executed every time you log into your account
❖ A good place to put some commands that help you set up your environment