

## 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"`

## Choices of Editors

- ◆ Console
  - `vi`, `vim`
  - `emacs`
  - `pico`
- ◆ With X Forwarding
  - `gvim`
  - `xemacs`
  - `gedit`
  - IDEs
    - Netbeans
    - Eclipse
    - KDevelop

## Environment Variables

- ◆ Set an environment variable X
  - export X="something"
- ◆ Show an environment variable X
  - echo \$X
- ◆ Common environment variables
  - \$HOME, \$PATH
  - \$JAVA\_HOME

## 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