

Introduction to Unix shell

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Previous experience with Unix shell?

Start here:

github.com/alexeymorgunov/unixshellcourse

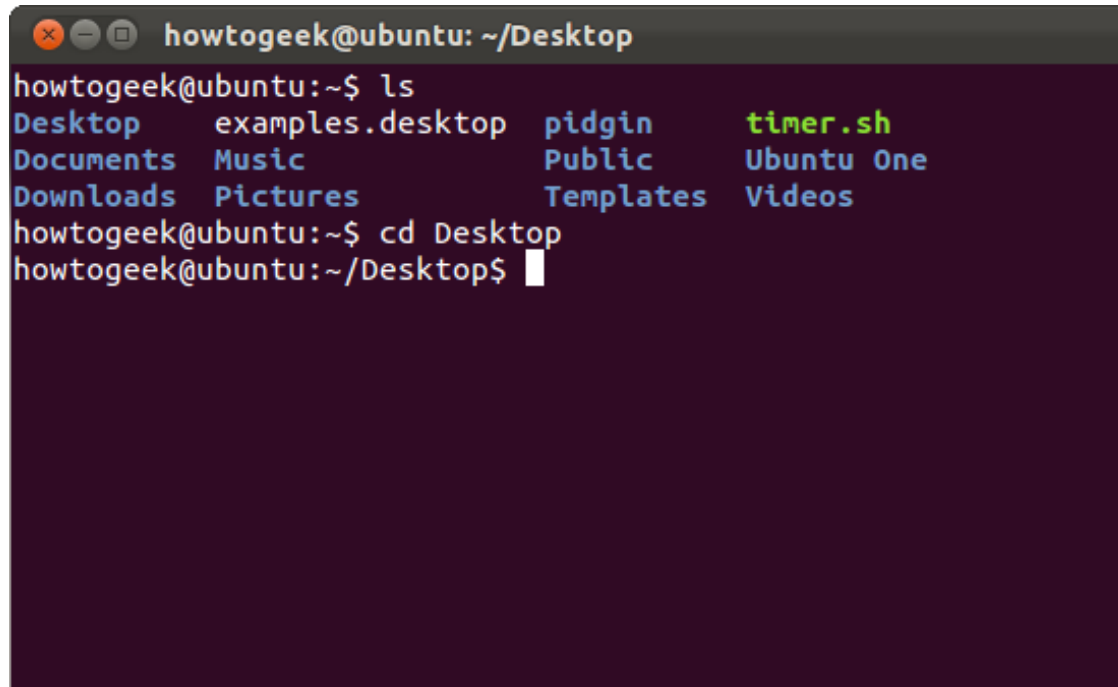
What is Unix?

- Modularly designed operating system
- Simple tools each performing well-defined functions
- Unified file system, means of communication
- Shell scripting and command language to combine simple tools into complex workflows
- Examples: Linux (incl. Android), Mac OS X (incl. iOS)



What is shell?

- Program that accepts commands as text input
- Converts them to operating system functions
- Easy to automate via scripting (c.f. GUI)

A terminal window with a dark purple background and a title bar that reads 'howtogeek@ubuntu: ~/Desktop'. The window shows a series of commands and their outputs. The first command is 'ls', which lists the contents of the home directory. The second command is 'cd Desktop', which changes the current directory to the Desktop. The prompt then changes from '~\$' to '~/Desktop\$'.

```
howtogeek@ubuntu: ~/Desktop
howtogeek@ubuntu:~$ ls
Desktop      examples.desktop  pidgin          timer.sh
Documents    Music              Public           Ubuntu One
Downloads    Pictures           Templates       Videos
howtogeek@ubuntu:~$ cd Desktop
howtogeek@ubuntu:~/Desktop$
```

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(true for any language!)

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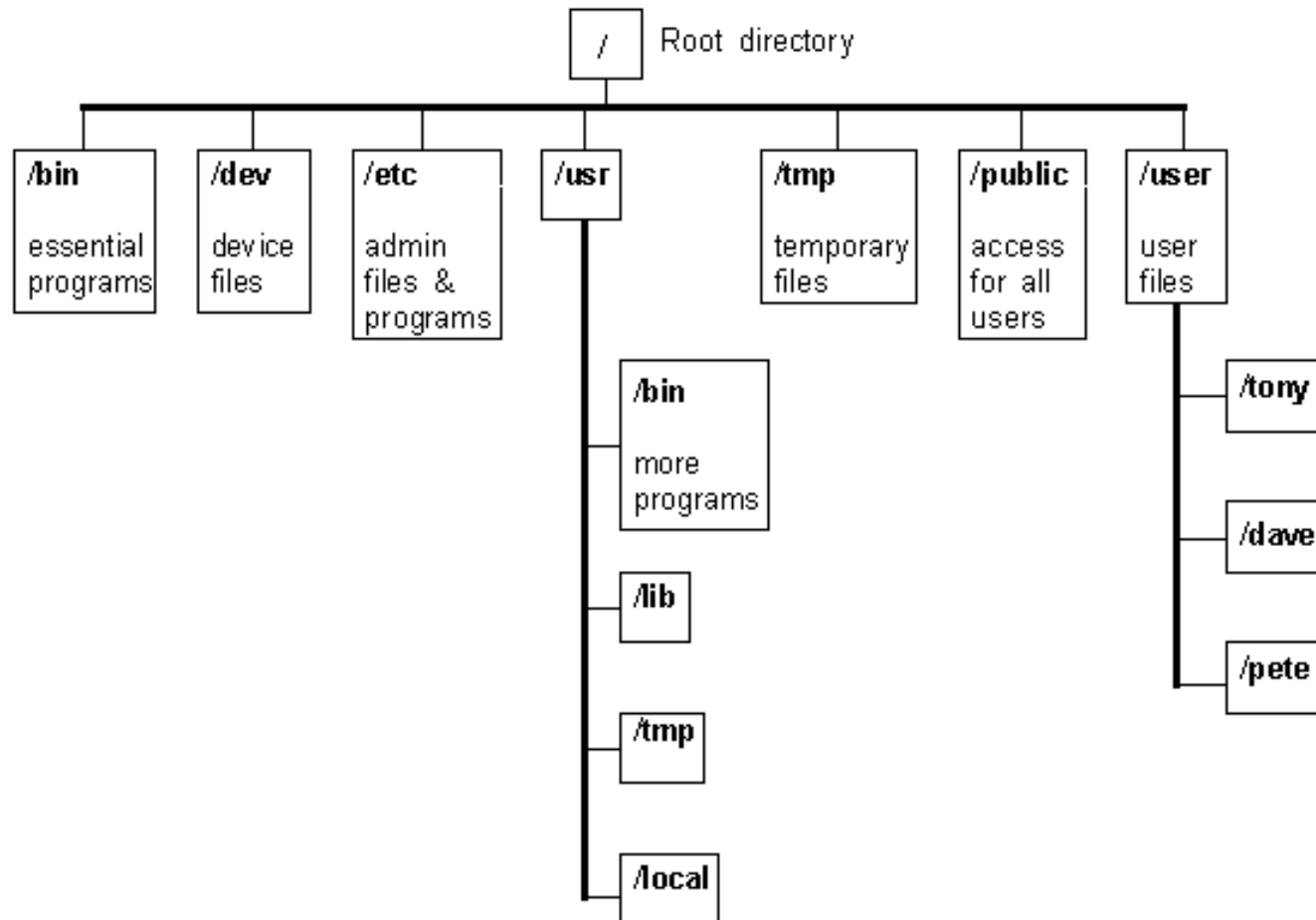
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- Google and Stack Overflow
 - Don't reinvent the wheel – someone somewhere is likely to have encountered the same problem before...

Command syntax

- *doSomething how toFiles*
- *doSomething how sourceFile destinationFile*
- *doSomething how < inputFile > outputFile*
- *doSomething how | doSomething how | doSomething how > outputFile*

```
[command] -[parameters] [file or folder]
```

Linux file system



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Thank you!

Have any questions, comments?

Email me: **alexey@manifoldresearch.com**