

MRC

Laboratory of
Molecular Biology



Introduction to Unix shell

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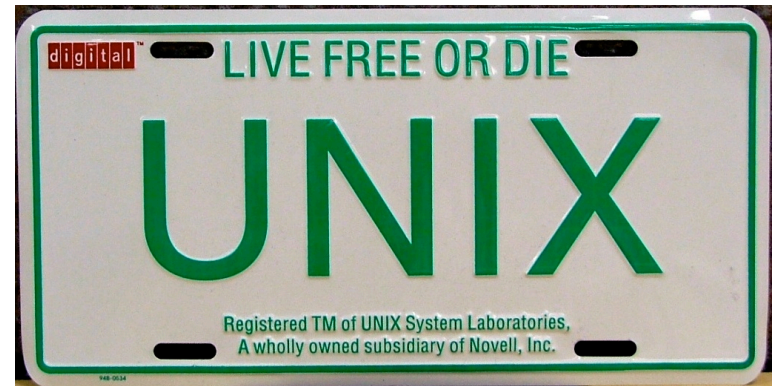
Previous experience with Unix shell?

Start here:

github.com/alexeymorgunov/unixshellcourse

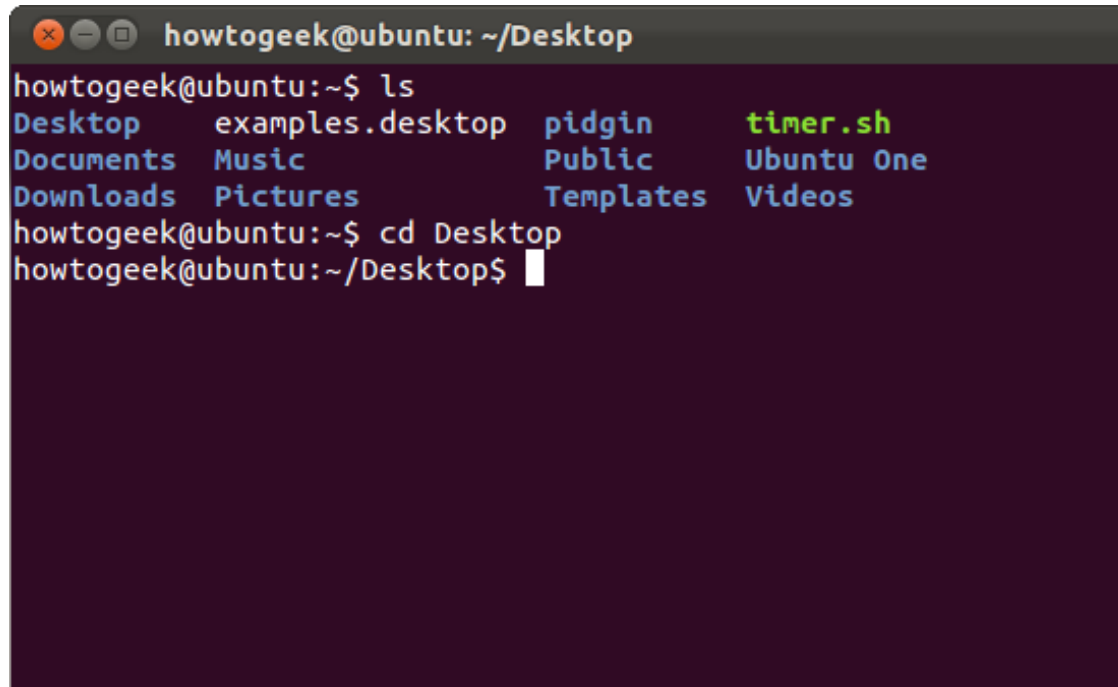
What is Unix?

- 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 terminal shows the following commands and output:

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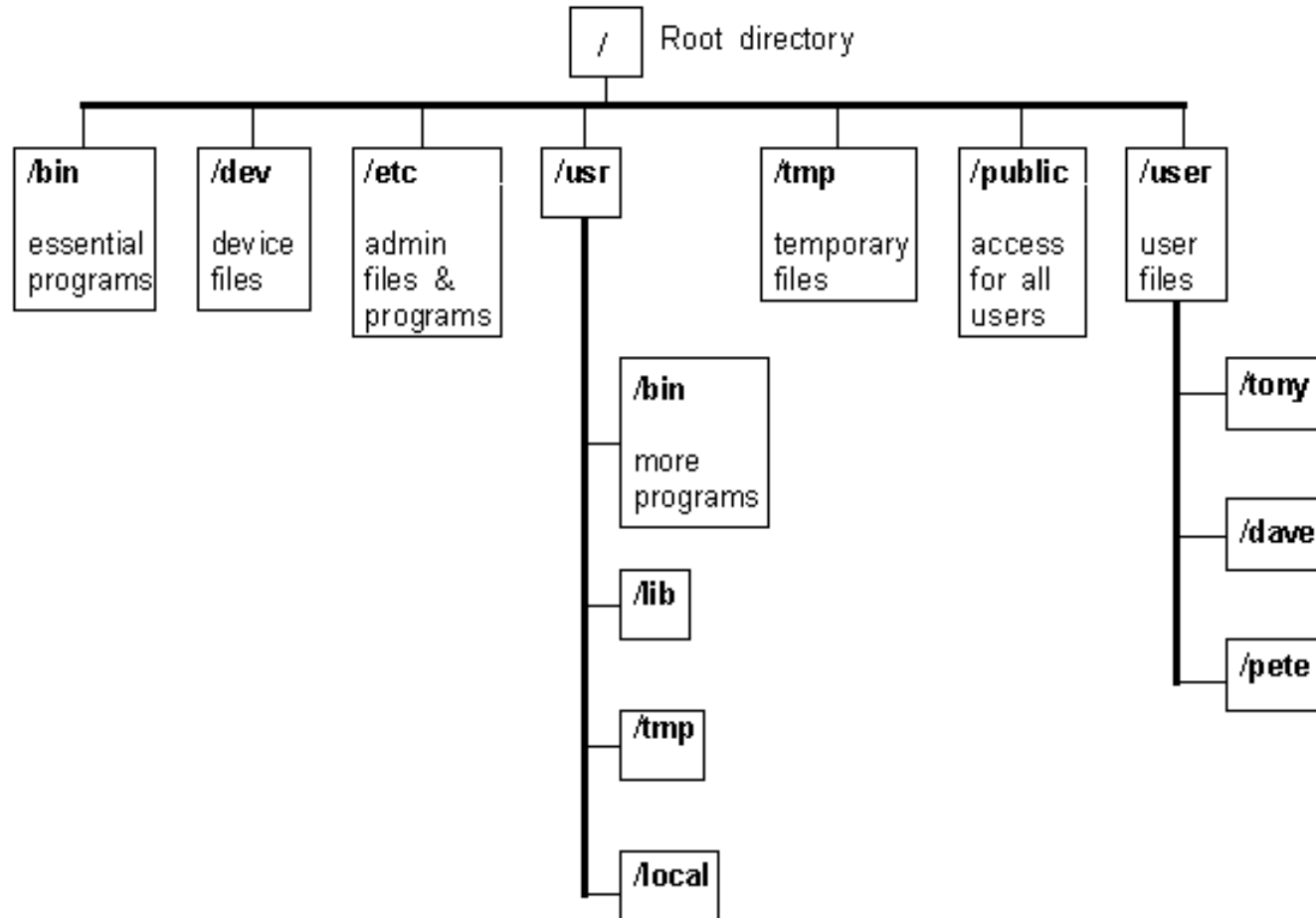
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- Google and Stack Overflow
 - Don't reinvent the wheel – someone somewhere is likely to have encountered the same problem before...

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



Start here

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Thank you!

Have any questions, comments?

Email me: asm63@cam.ac.uk