Computing For SURV112

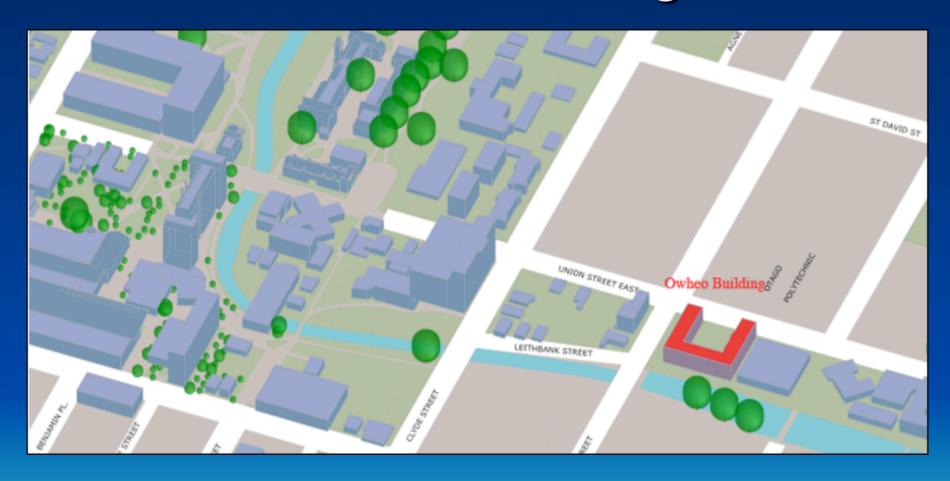Introduction

File Organisation

Back-ups

Introduction

- Purpose of the Course
  - To provide an introduction to computing.
  - To teach practical skills in Excel.
  - To help students become able and proficient learners.

Who?

- Mr. Nicholas Meek
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  - G06a Owheo Building
- Dr Richard O'Keefe
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Owheo Building

Labs

- 8 * two hour labs
  - G06 Owheo Building
  - Get lab book at first lab
  - Demonstrators
    - What have you tried?
  - Lab Use

Lab A Schedule

Week 7	Mon		Tue		Wed		Thu			Fri	
8:00 AM									8 - 10	KG, KC SJ	
9am - 11am	Bhaskar		Matthew Bhaskar Nick				Mike Bhaskar Nick		10 - 12	KC, RP NS, JW	
11am - 1pm	Matthew Mike Steven				KC, WW LN, NM		SJ, LN NM		12 - 2	NS, LN NM, ?	
1pm - 3pm			Nick Bhaskar Steven		Matthew Bhaskar Steven		Mike Nick Steven		2 - 4	KC, RP SJ, WW	
3pm - 5pm	Mike (1 hr) Nick Bhaskar				Matthew Mike Nick		KC, WW NS, LN		4 - 6	RP, SJ WW, ?	
					JW, KG SJ, RP		JW, KG SJ				
7:00 PM											

How?

- 6 * 1.5% lab assessments
- 1 * 16% Test in Week 10

File Organisation

- So files don't get lost
- Avoid duplicating files – reduce errors
- Ease back-up routine
- More efficient work practice

Back-up: Why?

- How important is that data?
- What would the consequences be if your PC vanished <u>today</u>?

"The pain of recovering from a disaster is almost always very high, and the cost is primarily in the time required to recreate the lost data."

http://www.pcguide.com/care/bu/exer.htm

Back-up: Risks

- Hardware failure
- Software failure
- File system corruption
- Accidental deletion
- Theft
- Sabotage
- Natural disaster

Backup: What?

- Data
- OS
- Applications
- Disk Images

Back-up: Media

- Media size matching
- CD
  - 700 MB
- DVD
  - ~8.5 GB
- Life Expectancy
  - 2 – 200 years
  - De-lamination, cd rot, corrosion, physical damage

Back-up: Media

- Hard drive mirror
- External/removable hard drive
- (RAID) Array
  – Redundant Array of Inexpensive Disks
- Life expectancy
  – Months - years

Back-up: Media

- Magnetic Tape
  - Large capacity (800+ GB)
  - Lasts 30 years (under ideal conditions)
  - Cheap(?)

Back-up: Media

- USB Key
  - Reasonable Capacity
  - Cheap
  - Reliable
  - Easy to Use
  - Reasonable life

Back-up: Remote

- Corporate
  - Retrospect
  - http://www.tapeguard.com
- Internet
  - Slow recovery?
  - Cost

Backup @ C.S.

- Student home directories
  - Nightly
  - Weekly
  - Using 6 HDD
  - Saved to permanent media at end of semester

Backup @ C.S.

- Web server, mail server, staff directories
  - Weekly (8 week rolling + snapshot)
  - Tape (~40 GB)

Backup @ C.S.

- Windows Users (in Domain)
  - Daily
    - External HDD
  - Weekly Tape
  - End of semester tape (maybe)
- Windows Users (stand alone)
  - Save to staff directories
  - Do your own

Back-up: Features

- A backup should be easy to do.
- A backup should be automated and rely on as little human interaction as possible.
- Backups should be made regularly.
- There should be at least two copies of the data, stored on different media, kept at different locations.
- A backup should rely on standard, well-established formats.
- A backup should not use compression.

http://en.wikipedia.org/wiki/Backup

Next

- Malware