Computing

Lesson 7: Selecting a Storage Device

Computer Systems

Mac Bowley

Selecting storage devices

Device	Type	Cost per GB	Capacity	Access speed	Durability	Reliability	Portability
USB stick	Solid state	£0.80 - £3.00	2GB-2TB	Fast	Very robust	Reliable	Very portable
SSD	Solid state	£0.10	128GB-4TB	Very fast	Robust	Reliable, but prone to wear	Only external drives
SD card	Solid state	£0.80 - £1.60	1GB-1TB	Fast	Robust	Reliable	Very portable
HDD	Magnetic	£0.02 - £0.03	500GB-12TB	Slow	Damaged if dropped	Very reliable	Only external drives
CD-R/RW	Optical	£0.20	640MB	Very slow	Easily scratched	Very reliable, if looked after	Very portable
DVD-R/RW	Optical	£0.03	4.7GB	Slow	Easily scratched	Very reliable, if looked after	Very portable
Blu-ray-ROM/R	Optical	£0.03	50GB	Slow	Easily scratched	Very reliable, if looked after	Very portable

Selecting storage devices

"Jamie wants to send his mum a copy of his wedding photos through the mail. There are a lot of photos, totalling 2GB of data."

Use the reference table above.

- Which type(s) would work?
- Are they all equally suitable?

Think of a device to recommend.

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"Maja has made a video game and wants to distribute it to her paying customers."

Capacity, cost (per GB), reliability, and portability

Make some recommendations for:
1. Which type of storage?
2. Which device?

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"Ana needs to back-up her video archives, she is a freelance videographer and has a large collection of videos to save."

Use the reference table to identify key characteristics that are important for Ana and to recommend a storage device.