Selecting Hardware appropriate for a user’s needs

For each of the scenarios below, carry out some research to find the most suitable computer hardware. For each scenario you will need to specify:

1. Recommended Computer System with specifications
2. Associated peripherals with relevant specifications
3. Cost of each hardware device
4. Justification for choice of hardware
5. Total cost – is it within the budget set out?

Scenario 1

Bill runs a children’s nursery. He has five nursery staff and has recently employed Phillip to do the daily administrative duties. Phillip suggests that they need to buy a computer for the day to day running of the nursery. Bill has agreed but sets out a budget of no more than £1900 to spend. Their system will need to be able to:

1) Take photos of the children and upload them to the computer.
2) Scan in old photographs as well as new ones sent by parents to store them digitally.
3) Bill wants to create a photo collage of all the children’s photos on one of the walls. He wants this to be created on the new computer system and printed in-house.
4) Phillip will need to type up letters and will need to print these out, but no colour is needed here.
5) To have a spreadsheet to calculate finances and print of regular financial reports.
6) Phillip wants to experiment with creating a website for the nursery. So an internet connection is needed.

Scenario 2

Seema is a computer games enthusiast. She loves playing all sorts of games and is addicted to high quality graphical online role playing games. She wants to purchase a powerful new computer for no more than £2000. The computer will need a lot of memory and a very fast processor. Seema has all the specialist software that she needs. Although she does want additional peripherals such as a joystick, a good sound system with microphone and headphones. Seema also wants to explore options of storage on DVD and Blu-Ray disk.
Selecting Hardware appropriate for a user’s needs

Scenario 3

Stefan wants to ideally spend approximately £4000 on a complete home computer system for his family. These are his needs:

1) Stefan has a TomTom and next month he’s purchasing an iPhone. He wants a system that will allow him to ‘sync’ these devices to his computer.

2) His wife Bella has a Sony Digital Camera which she uses to take lots of photos and shoot home videos. Currently these are all stored on memory sticks. She wants to upload all of them to a computer and then create backups to CD or DVD.

3) Bella would like to edit the videos to turn them into longer films – one for each family event. She would like to add text to the videos to remind them where they went and then convert the films to DVD’s.

4) Their 18 year old son Sean is living at home and studying graphics at university. He insists that he needs graphics tablet and graphics (such as Adobe Fireworks) software for his assignments as well as access to a good quality colour printer.

5) Their 15 year old daughter Kathy is in the middle of her GCSEs and needs the computer to do her coursework and homework. She also loves social networking so needs internet access and a web cam.

6) Stefan and Bella have relatives in Slovakia so would like to talk to them more regularly. They’ve heard of video conferencing and would like to try this out.

7) Sean and Kathy continuously argue over having to share resources in the home. It would be ideal if each had their own device.

8) Stefan loves sitting in his garden. He will need to use the computer system quite a lot for writing reports for work and carrying out financial analysis using data from the internet. He’s concerned that having a computer system will mean that he’s stuck indoors for most of the time. He wants a system that will allow him to work outside his house as well.

9) Kathy has a slight physical disability in her arms and finds precise finger movements difficult to do.