Explain and justify improvements that could be made to a computer system

One thing that the computer system can improve is the RAM. The computer that I chose and selected for Stephan (**PACKARD BELL iMedia S2185 Desktop PC**) may have a lot of hard drive space (1TB) but it does not have much RAM as it is only 6GB. RAM (Random Access Memory) is temporary storage that the computer needs in order to run programs and applications. It would be useful for the computer to have an extra amount of RAM because if Stephan were to be running a program such as a word document, it goes through the hard drive and into the RAM, if Stephan were to be working on the word document, it would be held in the RAM until he officially saves it onto the hard drive. But in this case, as Stephan wants to download a graphic software to use on his computer, by doing so it will be held in the RAM until fully installed, and when running the software, it will be used in the RAM for the time he is using it. If a computer has more RAM this is a great benefit as it means that data can be loaded from the hard drive and into the RAM quicker, speeding up the performance of the computer.

As the computer chosen only has 6GB of RAM this means that the RAM can only store, read and write a certain amount of files at a time. For example, computers with low RAM have problems with the performance of their computers, whereas if a computer has a larger amount of RAM that is able to store, read and write more files at a time, the performance of a computer will be increased, as this means that because there is more RAM, more files can be stored and ran. So overall, Stephan should decide to improve his computer system by updating the amount of RAM he has by buying more memory, for example RAM with 8GB, in order to be able to use his software efficiently and to ensure he has more temporary storage for all the files he wants to run whilst on the computer.

As Stephan is interested in using his graphics software, this would require a good graphics card. Although the Windows 8 computer comes with a NVIDIA GeForce GT 620 graphic card that supports useful features such as DirectX 11 and HDMI. It could still do with a good upgrade such as the latest graphics card from NVIDIA the NVIDIA GeForce GTX , which is faster with the speed of 6.0, supports 3D vision live (best for editing and viewing pictures videos) and Direct X 11.2, supports HDCP and HDMI, and overall produces high quality graphics.

By installing this graphics card alongside the graphics card that is already integrated with the computer it increases the benefits of having the software installed onto the system. For example, by having a good graphics card such as the GeForce GTX 690, it speeds up the performance of the computer as it means that it doesn’t necessarily need to work with the RAM because it isn’t integrated within the computer. This means that by having the graphics card installed, it will have its own memory that it can use for processing images and videos, making the computer faster as it isn’t taking up a lot of memory. Also by having this great graphics card, it enhances the performance of images and videos that are previewed, edited and played back on the computer, providing good HD graphics.   
So the reason why Stephan should install a new graphics card is so that he can be able to install and use his graphics software more efficiently (the fact that it can be ran smoothly, be viewed with HD graphics, and the fact that it will not slow down the computer’s performance).