**Networking Fundamentals – Individual Report One**

During the project there were some parts that link well with our log books and the work that we had done throughout the rest of the year. Using the log books as a reference to refresh our memory on certain topics such as calculating throughput and using simulations in riverbed was very useful and shortened the amount of time needed to complete these tasks. Overall I’d say it has been very useful to keep a log of all our work, as it allows us to refer back to all the work that we have done so far.

For showing our efficiencies, we had to refer back to the weeks where we used riverbed to complete simulations of networks and the weeks where we created some calculations for throughput. In particular week 2 was very helpful for the simulation as it we could compare our results to the star topology we made to check that we were on the right track. Also, as riverbed is rather confusing to use it made it a lot easier to get the right types of devices connected to each other without too many issues. Week 3 was also quite useful in this stage for taking notes about the network. As we calculated traffic in this week, it allowed us to estimate what our results should be for the simulation to make the right amount of packets where being received and that nothing major was wrong with it. Week 5 and 6 were particularly useful for working out the throughput of the cables we are using. As we already had the basic format for this process it was very easy to just use the values of our own cables instead to work out the new throughput.

During week 8 we began to touch on Ethernet networks. We focused mainly on creating a small peer-to-peer network but we also discussed a variety of different networks including those with switches. We discussed these in other weeks as well and this gave us the foundation we needed to know to be able to consider how we were to create our network, the devices we should use, how it should be laid out etc. Consequently week 14 was also rather useful towards the coursework due to its focus on optimization and network layout. It gave us more of an idea on how our network should be laid out. It was also really useful to know that we can optimize the simulations in riverbed although we didn’t get around to using this in our own simulation due to other problems with riverbed.

Use of the feedback sessions was also incredibly important and it allowed us time to reflect back on our designs, consider what we had done and then what we could do better. Judging other piers work was also really useful as it allowed us to spot things we had missed, things we could do better and things that we had done right. Overall these where incredibly useful and allowed us to improve our network design.