Reported Issue

Computer will not boot into the desktop. When turning the computer between the Window's logo appears but even after 5-10 minutes the computer never finishes booting up. In the weeks preceding the client reports that the computer was acting "funny" sometimes to hang up for no reason. The client believed that the computer might be a victim of a virus and ran a virus scanner to check. The virus check did not make any difference.

Diagnosis

There are two causes found with the computer hardware that is causing the problems.

1. One of the memory modules is malfunctioning. The client's computer memory was removed from the machine and put into a test computer and the test computer booted up then started displaying many of the same issues the client reported experiencing. The computer would lock up at random times and generally ran unreliably.
2. Hard drive has numerous bad sectors. This is the reason the computer would not boot up.

Resolution

Although only one memory module is bad both need to be replaced. Memory modules of this type need to be "matched" pairs so replacing only one module is not an option. I would also recommend that the memory module size be increased to the maximum alows set by the motherboard specs. This cost of RAM has fallen dramatically over the past few years and increasing RAM size is one of the easiest ways to increase the performance of a computer.

The hard drive will also need to be replaced. The bad sectors on the hard drive can be mapped and skipped over by the operating system but it is highly likely that additional sectors will soon go bad as well. A terrible the RAM an increase in the size of the hard drive is a no-order and will add very little if any additional cost. Much if not all of the data from the bad hard drive should be able to saved and transfered to the new hard drive.