In this week’s group assignment, we were tasked with creating a diagram that shows locations of all components of the network. We also have to show where and how cabling should be ran. The cabling that we decided to use is CAT6 cable. This was chosen because data transfers are up to 10,000 MBits/second in an Ethernet network with Cat 6 cable, which is more than doubled the average of Cat 5, while still using four pairs of wires. Cat 6 cables are backwards-compatible with Cat 5 cables and the installation means better bandwidth allotment. We will use a patch panel located next to the switch.  We run the wiring along the wall where it meets the ceiling. This will be accomplished using crown molding that can conceal the wiring.   We will place drops at each workstation location.  The wireless access points will be attached to the ceiling so we will run the wiring for those across the top of the drop ceiling. The network will be set up as a hub and spoke network. Hub and spoke was chosen because our endpoints will connect to a switch.  The current devices we were told we have do not necessarily provide for redundancy so we will not be able to mesh for redundancy.  The company will look at adding devices in the future.