Design Team
• Corey Davis
• Jarret Lavallee

Progress Report:

So far we've started our research on how the common wireless networking devices work. We've found that they use radio waves similar to that of cellphones, radios, bunny ears and RC car controllers. The data is transfered between antennas through radio waves. The receiver has to be a transmitter as well in order to receive packets of data. The frequency that we're going to be operating with is 2.4GHz. This frequency has the ability to hold a lot of information but at the same time it doesn't broadcast very far. The strength of the broadcast depends on the power output, and whether or not the signal is obstructed by large objects such as buildings or trees. We will be using 802.11g, it sends up to 54 megabits per second. It uses OFDM, which is more efficient than CCK encoding, which is found in 802.11b. We've decided that the best way to utilize this frequency is to build an antenna because of its accessibility to receive and transmit data. There are a few different types of antennas, directional antennas, omni-directional and point to point.