Kiera Crist ([kcrist@u.rochester.edu](mailto:kcrist@u.rochester.edu))

CSC 257 Computer Networks

Assignment #5

Choice 4, Gnutella sniffing

I am not going to create my own gnutella servent, instead I have found a servent program, Phex, which is made with Java and open to developers improving it or building something on top of it. (<http://www.phex.org/wiki/index.php/Developers_Wanted>) I am going to take the code of Phex, and modify it so it also saves the messages it receives. Modifying an existing program that is able to connect to the network will be much easier than creating one from scratch, though it has its own challenges. I’ve looked at the code, mostly at the message handling code and the message format code, along with the connections. All it would take would be a bit of file i/o code to write the message to a log file, it’s just a question of where to put the code.

Once I have a way to save the queries as text, I will analyze them using r, to summarize the data. R analysis would only work for the variables that are numbers. The queries, being strings, won’t be able to be analyzed with R, and will have to be done by hand.

(Phex code source: <https://svn.code.sf.net/p/phex/code/phex/trunk/src/main/java/phex/>)

Challenges :

1)figure out how to run phex.

2) figure out how to modify phex (at all )

3) figure out how to modify so it logs the messages

4) analyze messages.

This is all assuming I can modify an existing program to do this. If I can’t, I will just build on top of my code for assignment 4, and probably look at phex’s code for ideas how to do things. This will require much more work.

So for this version, I would have to get it to work with another instance of itself more than it does, figure out how to get it to connect to the larger network (how to get/find the neighbors to connect to) , and log messages, and use the same method of analysis for the messages as above.