Shannon Rhodes

Computer Networks – Lab 3 Report

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| --- | --- | --- | --- | --- | --- | --- |
|  | Test File 1 | Test File 2 | Test File 3 | Test File 4 | Reference Test File 1 | Reference Test File 2 |
| Name of student that supplied the test file | Shannon Rhodes | Colleen Hickey | Matthew Myers | Shawn Vettom | Will Landis, Matthew Gregory | Shannon Lemmer, Megan Underwood |
| recvfile.txt matches sendfile.txt | yes | yes | yes | yes | yes | yes |
| Frame sequence numbers correct? (on both sending and receiving side) | yes | yes | yes | yes | yes | yes |
| Correct bit stuffing and de-stuffing? | yes | yes | yes | yes | yes | yes |
| Frames pass checksum? | yes | yes | yes | yes | yes | yes |
| Enter computer Checksum of first frame | 9933 | 9577 | 0569 | 9921 | 9447 | 9689 |
| Enter computer Checksum of last frame | 2460 | 9391 | 4684 | 2502 | 2017 | 3593 |

The final checklist matches the checklists of all my team members.

The first thing I detected were errors when there were many ASCII characters in a row. I was missing a decrement of my counter and it was leaving an extra DLE character. This error has been fixed. The next error was in the checksum. I first had to change the actual checkSum algorithm to produce four bytes. Next I realized I did not have the correct amount of bytes in total. I changed the part when I was summing all the fields to be a dynamic variable instead of hard coding. There was also some handling issues with my last packet and its count which was effecting the checkSum. Lastly I had to change the way I was converting the checkSum algorithm. Before I used an array using sprintf and this was not giving the correct checkSum algorithm. My teammates helped me use a better method.

As of now, there are no unfixed errors to my knowledge.

INDIVIDUAL TESTFILE

This is Shannon's Test file.

!@#$%^&\*()~\_+{}[]|\?><": testing these random characters

# ASCII character #1 STX

Let's talk about things that are interesting

# ASCII character #2 DLE

HMMMMM Chelsea soccer club,

traveling around the world specifically New Zealand,

buying cool gadgets,

friday night lights is the best TV show ever,

going out in New York City with friends.

# ASCII character #3 ETX

I'm feeling solid about my test file now.

GROUP TESTFILE

sendfile.txt – Check sum results were first packet = 9921, last packet = 4663

