ASSIGNMENT 2: TCP/IP AND UDP SOCKET PROGRAMMING

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Your report should adhere to the following format.

## Title Page

Document the course and assignment number, author(s), student ID(s), and date

## Abstract / Assignment Scope

Two to three paragraphs, stating the nature of assignment, who the intended audience is, and other relevant background information, as well as a summary of results.

## Frame Format

Provide (in chart format) the layout of the data frames you used, along with a description of each field.

## Testing Method

Describe how you carried out the tests

* How did you (attempt to) accurately measure speed?
* How did you (attempt to) detect missing blocks?
* How did you (attempt to) detect out of order blocks?

## Results

Include your result tables here. Be sure to introduce the section with a sentence describing what you observed, especially noting any strange or unusual results.

## Theoretical Speeds

State how you determined / calculated the maximum theoretical speeds you expected to achieve.

## Comparison of Theoretical and Measured Results

Examine how your results for each combination varied with respect to each other, as well as in comparison to theoretical results. Make sure to indicate:

* Is there a speed difference between sending blocks of data between 2 Windows PCs versus 2 Linux PCs?
* Number of bytes per second that can be reliably sent
* Were all blocks obtained in the order that they were sent
* Does TCP have any appreciable overhead in send/receive vs UDP

## Conclusion

Given your observations, when would you use TCP, and when would you use UDP? Consider your references as well as your results.

## Work Estimate and Breakdown

For each team member, provide an estimate of the hours worked and tasks completed in the table format shown below.

Table 3 - Team Member Work Breakdown

|  |  |  |
| --- | --- | --- |
| Team Member | Hours | Task |
|  |  |  |
|  |  |  |

## References

Provide properly cited references indicating where you obtained your information. Note that Wikipedia should not be used as a primary source, and that any sources included here must be referred to in your document.

## Appendix: Compilation and Usage Instructions

In order to be able to repeat your testing, readers should be able to reconstruct your tests (including the executable) from your source files.

## Evaluation

Please include the evaluation form as a separate last page in your report.