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Portfolio 2

DRTP

[1 Introduction 2](#_Toc131105778)

[2 Background 2](#_Toc131105779)

[3 Implementation 2](#_Toc131105780)

[4 discussion 2](#_Toc131105781)

[5 Conclusions 3](#_Toc131105799)

[6 References 3](#_Toc131105800)

# Introduction

DATA2410 Reliable Transport Protocol (DRTP)

This group project involves implementing a simple transport protocol that contains an advancement of data delivery on top of the already existing UDP. Our aim is to ensure that our protocol delivers data smoothly and in sequence without missing data or producing/allowing duplicates. Data that is corrupted, misplaced or duplicated gets recovered with TCP. In order to ensure dependability, TCP assigns a sequence number to each byte it transmits and demands an acknowledgment (ACK) from the receiving TCP. The data is retransmitted if the ACK is not received within the time given.

User Datagram Protocol (UDP) is a transport layer protocol which is connectionless thus viewed as unreliable. The delivery of data packets is not guaranteed and UDP datagrams are sent without an acknowledging message because of it being connectionless and no proper connection between sender and receiver is established. THE DRTP will use the foundation of a UDP with additional code for it to deliver data reliably. It would seemingly operate similar to how TCP operates. In this way, the file which will be transmitted from the server site to the client, would be received fully, in sequence and without any duplicated data.

Introduction: what you are doing and why it’s important and the structure of your report

An introduction should tell the reader why this work is interesting.

It should describe:

1. the key topic(s)
2. the problem(s) that you are solving
3. your approach to the solution
4. limitations and outcomes
5. how the rest of the document is organized

# Background

Your background section should include the appropriate theoretical background that your reader should know before delving into the details. For example, what is stop and wait? How does it work?

What is stop and wait?

What is gbn

What is SR

# Implementation

Add your implementation details here - with code snippets, diagrams and other.

# Discussion

Test cases here and show how you handle losses, reordering and duplicate packets.

# Conclusions

# a summary of what you have done, including key results.

# References (Optional)

NOTE:

The report cannot exceed 20 pages, including the list of references. The page format must be A4 with 2 cm margins, single spacing and Arial, Calibri, Times New Roman or similar 11-point font.