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INFO-5104 - C++ Advanced Topics

C++ Final Project

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Project 1

User Guide

Graphical Interface

Generates .exe

Server UI

* Has one file directory box
* Has one server log box (black background green text
* Will show all server logs and transactions
* Will show all errors and successes
* Will have minimal functionality

Client UI

* Core application!
* Two directory browsers
* Button row in the middle for functionality
* Each button will call the wrapper threads
* All messages will be done through message boxes
* Last Error / Success in a textbox at the bottom

DLL Threaded Wrapper

Generates DLL

Server Business Layer

* Runs Listener on a Thread
* Client Calls launch new Thread
* Client Call work is done in the lib
* DLL just ensures work is done
* Reports success / failures to GUI

Client Business layer

* Sender launched on a Thread
* Each Sender Call is done by a separate Thread
* User can make multiple requests
* Each request is done on a separate thread
* Ensures the server checks the queue for more work

Code Library

Generates .lib

Server Class

* Listener
* Receives Server Calls
* Sends / Receives Data
* Has a maximum amount of threads to accept / receive data and ensures wait time is done when to many threads are running at once

Client Class

* Sender
* Calls Server
* Sends Files
* Retrieves Files