# Inter-process Communication

**Task:** Implement a simple console client-server application in C++ using any presentation technology. The application should transfer a file over the network from the client to the server.

**Requirements:** The file name should be passed to the client as a command-line argument.

**Notes:**

* The client and server are separate executable files and can be located on the same PC (i.e., the transfer can be done via localhost).

**Evaluation Criteria:**

1. No resource leaks (whether memory or handles/descriptors).
2. All errors are checked. Status codes returned by IPC mechanisms should be verified. All exceptions should be caught and logged (ensure there are no leaks here, recall the RAII pattern).
3. The code functions as described in the task.

**Bonus Points (in case of a disputed grade):**

1. The inclusion of brief documentation for the project, including build/run instructions.
2. The code should not include files that can be generated from your source files (you can refer to the .gitignore file for Visual Studio or other IDEs, or for CMake).

**Links:**

<https://www.boost.org/doc/libs/1_84_0/doc/html/boost_asio/tutorial/tutdaytime1.html>

<https://www.boost.org/doc/libs/1_84_0/doc/html/boost_asio/tutorial/tutdaytime3.html>

<https://learn.microsoft.com/en-us/windows/win32/winsock/finished-server-and-client-code>

https://gist.github.com/crouchggj/6894348