

CSSE 477: Lab 10 – Interoperability

We will carry out this lab using a process of inquiry and exploration rather than using a prescriptive spec. To start with, list down **three questions** you have about semantic interoperability.

Use one (or both) of the following resources to understand how semantic interoperability is achieved in real word:

Google RPC (GRPC) Framework: <http://www.grpc.io/>

Facebook/Apache Thrift Framework: <https://thrift.apache.org/>

Here are the minimum tasks that you must perform in your exploration:

1. You must implement a server program using one of the two frameworks specified above in a language of your choosing. The server should be able to take a work unit from a client, perform the work, and return the result to the client. The work unit can be as small as adding two integers and returning the sum. If you want to implement something sophisticated, go for it!
2. You must implement two clients that send a work unit each to the server and print the results on their consoles. These clients must be implemented in **two different languages** of your choosing.

As you are solving these two tasks, try to find the answers to the three questions that you posed above. You will turn in the following on Moodle:

1. A **pdf** document that shows the three questions and answers, description of your application in a few sentences, and snapshots of the client and server consoles that clearly show they worked as expected.
2. You will separately bundle the three projects (one server and two clients) in the **zip** format and turn it in. Each project should have a **README.md** that explains how to build and run the project.