

Sockets Programming Project

*Assigned: November 20**Due: December 4, midnight*

Project Overview

This project will give you the opportunity to implement a networked application using sockets. You may choose from the following two projects, described in more detail in documents available from the class web page:

1. **DNS client.** In this project, you will write a domain name client to interact with a DNS server that we will maintain. This project uses UDP sockets, rather than TCP sockets. It will require you to either know the basics of DNS already or to do some reading on your own. You will only write one side (the client), which reduces the amount of coding but can make debugging more challenging.
2. **Remote random number generation.** In this project, you will write a client and a server that communicate using TCP sockets. The server provides a service consisting of the generation of a random number. You do not need any more background to do this project, beyond what we have covered in class. You will write both the client and server; debugging may be easier since you have control over both ends.

In either case, you may work either alone or in a group of two. Both project members will receive the same grade for the project.

You may write your code in C, C++ or Java, however we will be most able to provide assistance if you code in C.

What to Turn In

Turn in your well-documented code and its output. You will be graded on the correctness of the code and its readability and structure. Include in your writeup a publically accessible location where the TA can get an on-line copy of your code.