FTP Tutorial

Course: Computer Networks (CS - 307) **Instructor:** Mr Ibrahim Nadir **Fall 2019 National University of Computer and Emerging Sciences, Lahore**

Introduction

FTP is short for "File Transfer Protocol", it is an application layer protocol based on RFC 959. It is used for file transfer, using this a client can remove, download, delete, or upload files on a server. It works over TCP, which connection oriented protocol. FTP is older than HTTP but it is still being used to transfer some files like in building a website, to download new applications, via web browsers. HTTP also works with FTP to deliver files.

FTP and HTTP both are part of the application layer that combines communication protocols and interface methods. Here we will see how they are different. You can use HTTP to view websites and the FTP just for transferring files. The client for HTTP is the browser (Chrome, Opera, etc.) and for the FTP is the command-line. Both can be used to admin a website, but HTTP is more popular. Just in some cases, the FTP can be more appropriate. It is believed that FTP is more efficient for larger files, while the HTTP is better for smaller. FTP doesn't send meta-data, just binary and the HTTP uses pipelining to organize the transfer of multiple files.

Tools

To experiment with FTP following list of tools and user applications is provided.

- 1- FileZilla
- 2- Web Browser (Any Chrome, Firefox or Edge etc.)
- 3- FTP Server

Experimentation

Here preliminary introduction to tools is provided.

1. Accessing FTP using Web Browser (as FTP Client)

Open Web Browser, and type FTP server address in address bar as "ftp://<server-address>". If server is password protected you will be prompted for credentials.

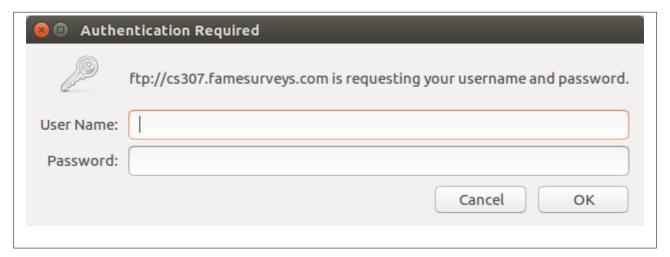
For this tutorial:-

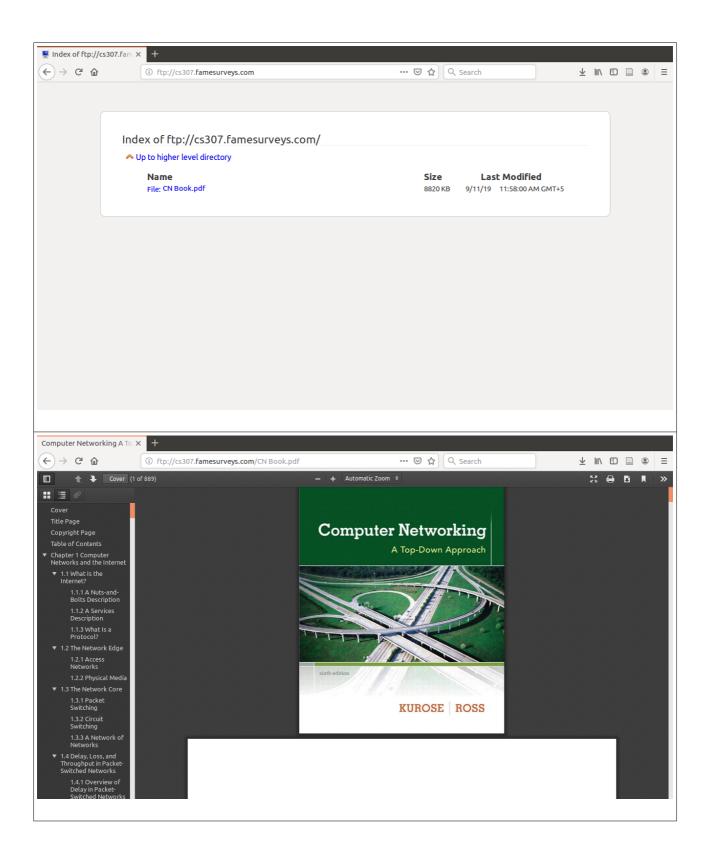
FTP Server Address: ftp://cs307.famesurveys.com/

User name: cs307

Password: Bvte50!0XMbrpjqj

Important: This FTP server is available freely for educational purpose, avoid abusive use.

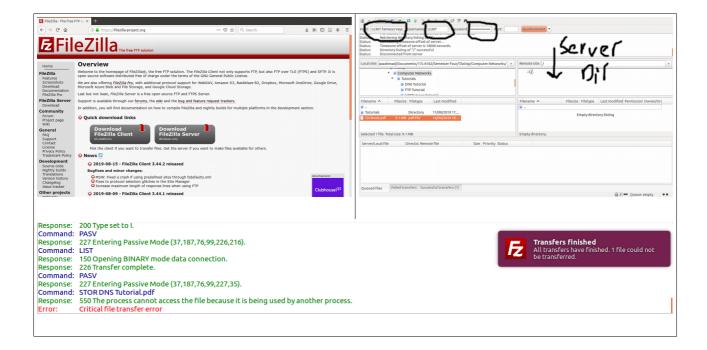




2- FileZilla

It is a FTP client open source application available for all Linux, Windows and OS X etc. See the connection procedure and sequence of commands issued in attached screenshots.

Download from here: https://filezilla-project.org/



3- FTP Server

Use the FileZilla FTP server (an application) to setup your own FTP server on Windows machines.