

Mobile Computing Project Outline: Mobile FTP client

Description

FTP stands for “File Transfer Protocol.” It’s also one of the oldest protocols and convenient way to move files around. An FTP server offers access to a directory, with sub-directories. Users connect to these servers with an FTP client, a piece of software that lets you download files from the server, as well as upload files to it.

In windows, some SFTP server connection client based on SFTP/FTP protocol can provide a graphical user interface to manage the file in remote server. It includes downloading, uploading files, editing files and move file remotely.

This project is a FTP,/SFTP client in mobile devices powered by android. It will enable mobile devices to connect to a remote Linux FTP server via giving configuration including server’s IP address, the host user name and password. After a stable connection established, the user can basically lookup the legal directories in the server and download/upload file between the phone and server. The configuration of the connection setting should be able to preserved to use again conveniently.

Feature

To be expected, the project ingrates features below:

- Connection: It should be able to connect to a server successfully via SFTP/FTP protocol.
- Directory display: Read the directory structure on the remote server and display in some graphical way (for example list view).
- Upload/download: Allow user to upload file from local storage and download file from the remote host.
- Report: When access denied and connection error happen, report to user.
- Progress Bar: In process of downloading/uploading file, make the progress as a progress bar.
- User interface: A relevantly more transparent user interface should be created.

Approach

-Week 9 :

In week 9, feasibility for implementation of FTP protocol library will be examined. The prototype of user interface will be designed and implemented

-Week 10:

In week 10, connection and report operation is expected to implemented. In this stage, the session between program and FTP server should be manipulated by "Connect" and "Close" with a connection state reported displaying.

-Week 11:

In week 11, Information (at least name and path) of the file, directory and sub directory can be send back after successful connection and display in some form.

-Week 12:

In week 12, the feature accomplished above should be developed to be operated and work in easier way (for example, show a dynamical list to show a structure of a directory). the program should can download/upload file via protocol library by inputs field of the path in the server and name of the files.

Week 13:

In week 13 the program should can download/upload file via protocol library by select the list button. It also expects an updates on the report implementation to involve the downloading and uploading message.

Week 14:

The program adds distinguish icon to directory and file with different suffix (For example, icons for .html file and general pdf is different).Combine the downloading and uploading operation with the graphical user interface to make it easier.