

COP290: Assignment-2 Changes to Original Documentation- MyDropBox

Aviral Jain : 2013CS10215
Rakshak Satsangi : 2013CS10250

March 2, 2015

Contents

1	Sub Components in Design	2
1.1	GUI	2
1.2	Networking	2
1.3	Database Management	2
1.4	Minimal Data Usage	2
1.5	Local Folder on a Machine: Creating a Sync	3
1.6	File History	3
1.7	Persistent storage	3
2	Extra Features	3

1 Sub Components in Design

1.1 GUI

On opening the application, first we need to connect to server giving ip address and port number. Then the user can either Sign in or Sign up. After Successful Login, the user can see all his files and folder on the server in a Tree Widget. Radio buttons are used to translate between myfiles, shared files and public files. There are several options/actions that can be applied to the file/folder like open, download, upload, upload revision, delete, create new folder, sync, search.

1.2 Networking

We will use Stream sockets for interprocess communication and Forking for Multiple clients. Openssl library is used for safe transmissions.

1.3 Database Management

We have used a text file to store the data of all the existing users. Each user has a unique username. On share a user has two options:

- Share with Public: On this the selected file path will be written in a txt file in the public folder of the user.
- Share with Specific user: On this the selected file/folder path will be written in the txt file of other user's shared folder.

1.4 Minimal Data Usage

Since we are keeping a track of file path only while sharing and not transferring the whole file, we are saving on data storage.

1.5 Local Folder on a Machine: Creating a Sync

A Local Folder will be created in the directory of the source code. The synced, opened, downloaded files will be recieved in this directory.

1.6 File History

We have kept the past files in renamed format.

1.7 Persistent storage

Sync Button would sync all the files/folder on the server to the Machine of the user. In case a network failure occurs, the user can still edit any file in the diconnected mode.

2 Extra Features

1. The user is given the option of search in his server directory.
2. The complete directory is visible in a nice Tree Widget format.