



Vietnamese-German University

# Course: Computer Network 2

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## FTP Client Implementation

[https://github.com/Afihu/FTP\\_Client](https://github.com/Afihu/FTP_Client)

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# DLP TEST

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## FTP Test

Our Public FTP test site info is below and can be used to upload test DLP files. The files will be stored for 10 minutes before being deleted.

FTP URL: [ftp.dlptest.com](ftp://ftp.dlptest.com) or <ftp://ftp.dlptest.com/>

FTP User: dlptester

Password: rNrKYTX9g7z3RgJRxWuGHbeu

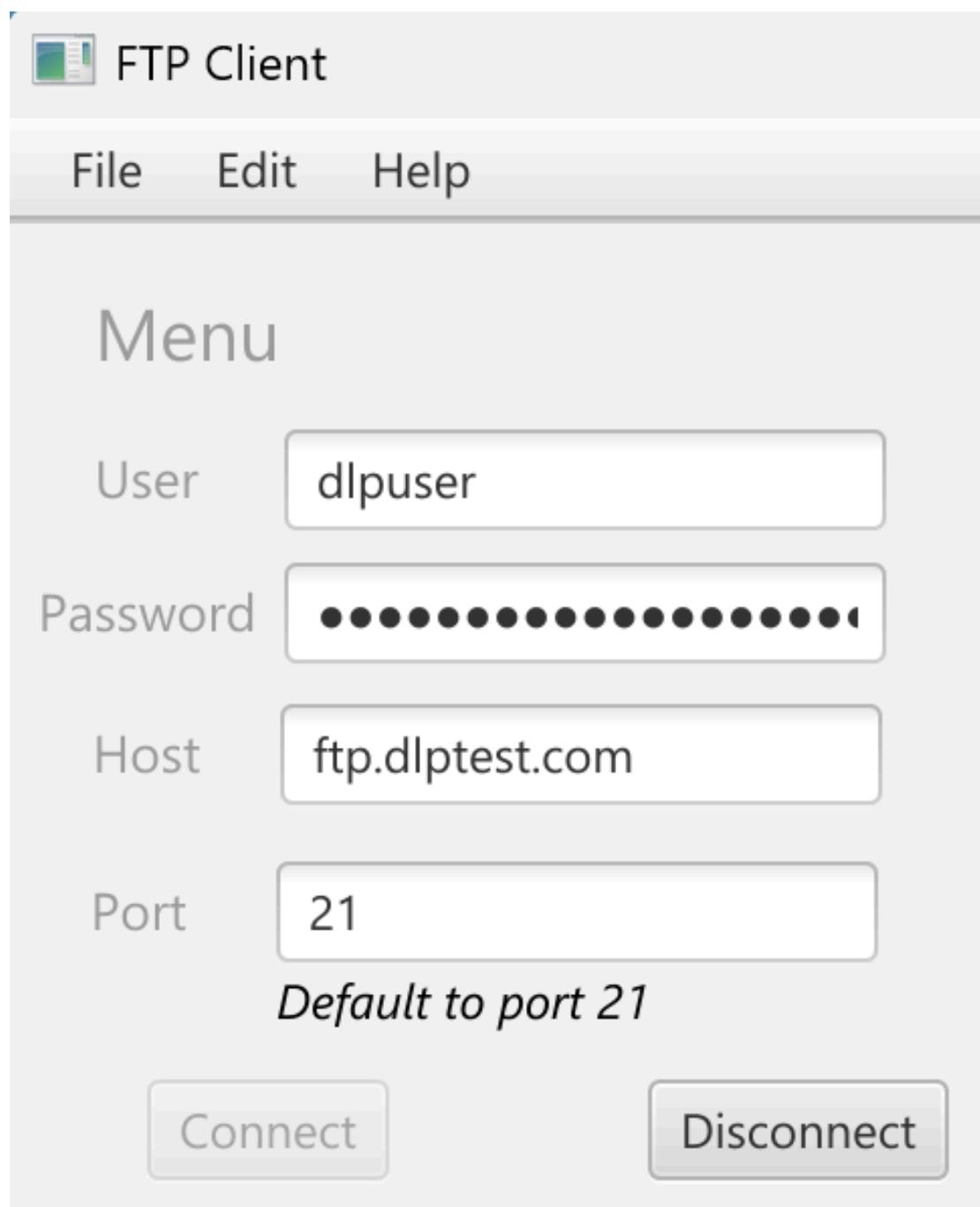
FileZilla Profile: [https://dlptest.com/DLP\\_Test\\_FTP\\_FileZilla.xml](https://dlptest.com/DLP_Test_FTP_FileZilla.xml)

# Functions:

1. User authentication
2. Dual-pane interface (local and remote)
3. Directory browsing (local and server)
4. File details view (name, size, type, date, path)
5. File deletion
6. Folder creation and deletion
7. File download
8. File upload



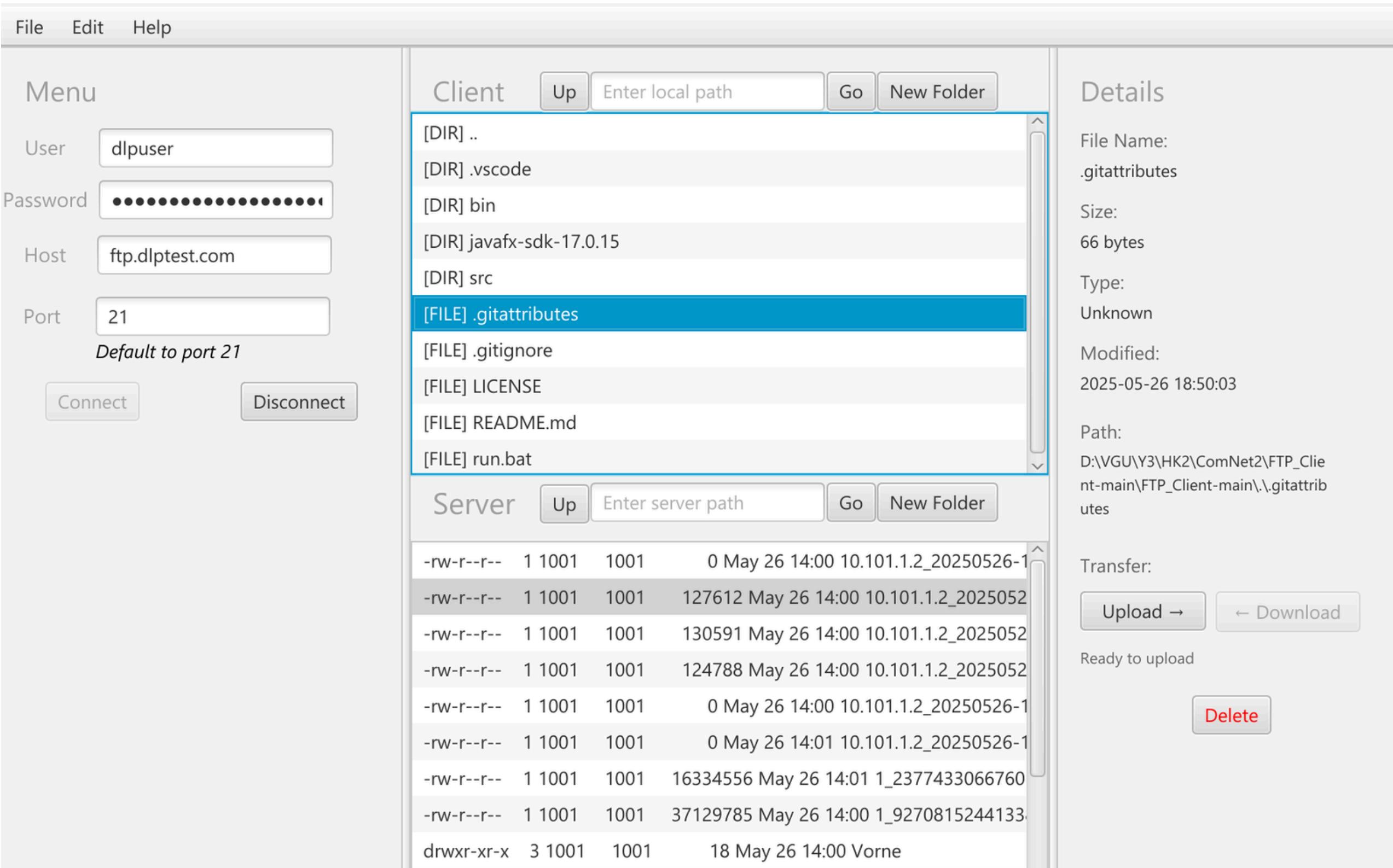
# 1. User authentication (username/password)



```
/** Login to the FTP server. */
public boolean login(String username, String
    password) throws IOException {
    if (!isConnected) {
        throw new IOException("Not connected to
            FTP server");
    }
    this.username = username;
    this.password = password;

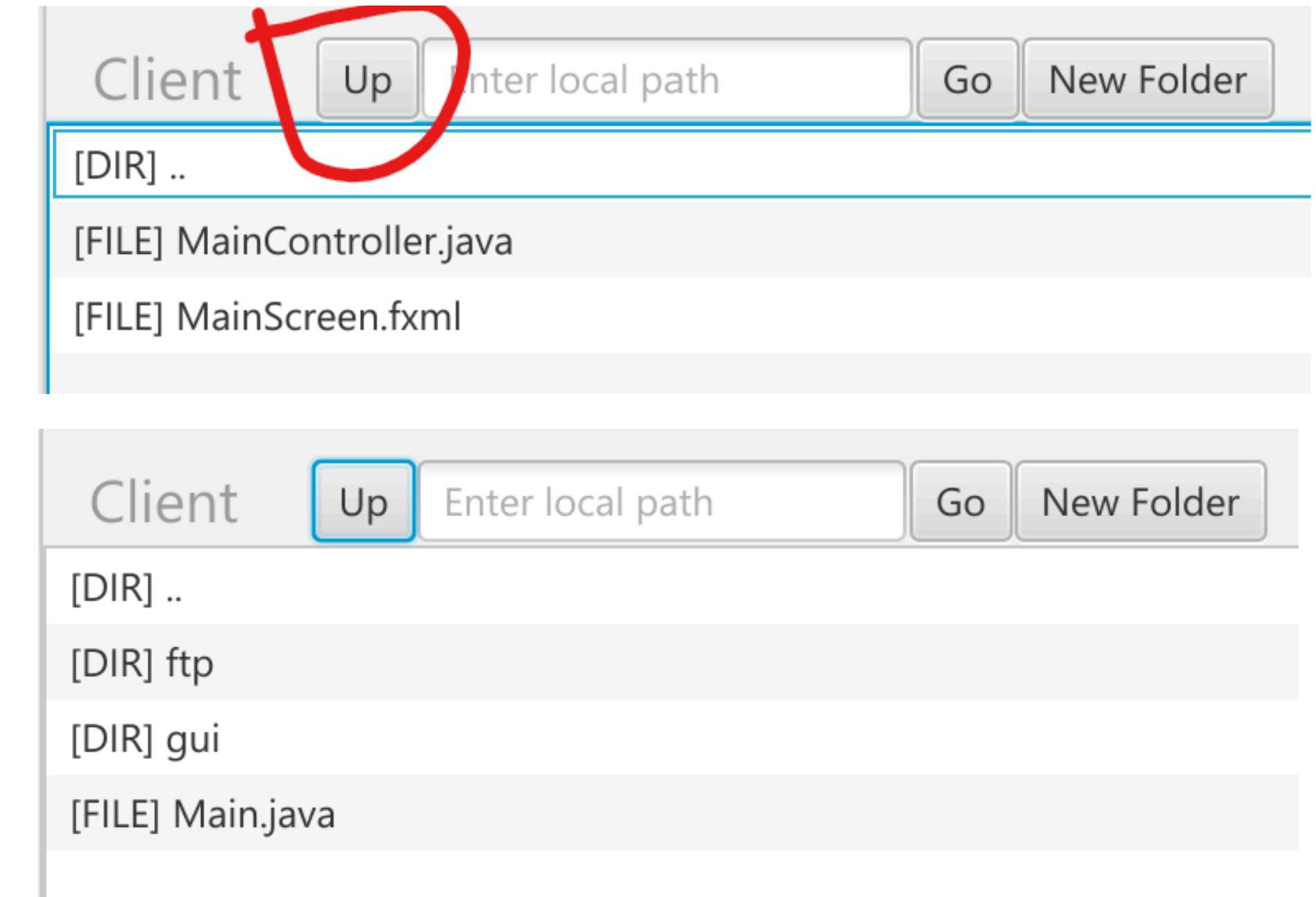
    sendCommand("USER " + username);
    FTPResponse userResp = readResponse();
    if (userResp.getCode() == 331) {
        sendCommand("PASS " + password);
        FTPResponse passResp = readResponse();
        if (passResp.getCode() == 230) {
            isLoggedIn = true;
            return true;
        }
    }
}
```

## 2. Dual-pane interface (local & remote)



### 3. Directory browsing (local and server)

```
FTP_Client/
└── src/
    └── com/ftpclient/
        ├── Main.java
        ├── ftp/
        │   ├── FTPClient.java
        │   ├── FTPCommands.java
        │   └── FTPResponse.java
        └── gui/
            ├── MainController.java
            └── MainScreen.fxml
    └── javafx-sdk-17.0.15/
    └── run.bat
```



# 4. File details view (size, type, date)

## Details

File Name:

10.101.1.2\_20250526-08234463\_IVA.jpg

Size:

128.5 KB

Type:

Image File

Modified:

May 26 12:23

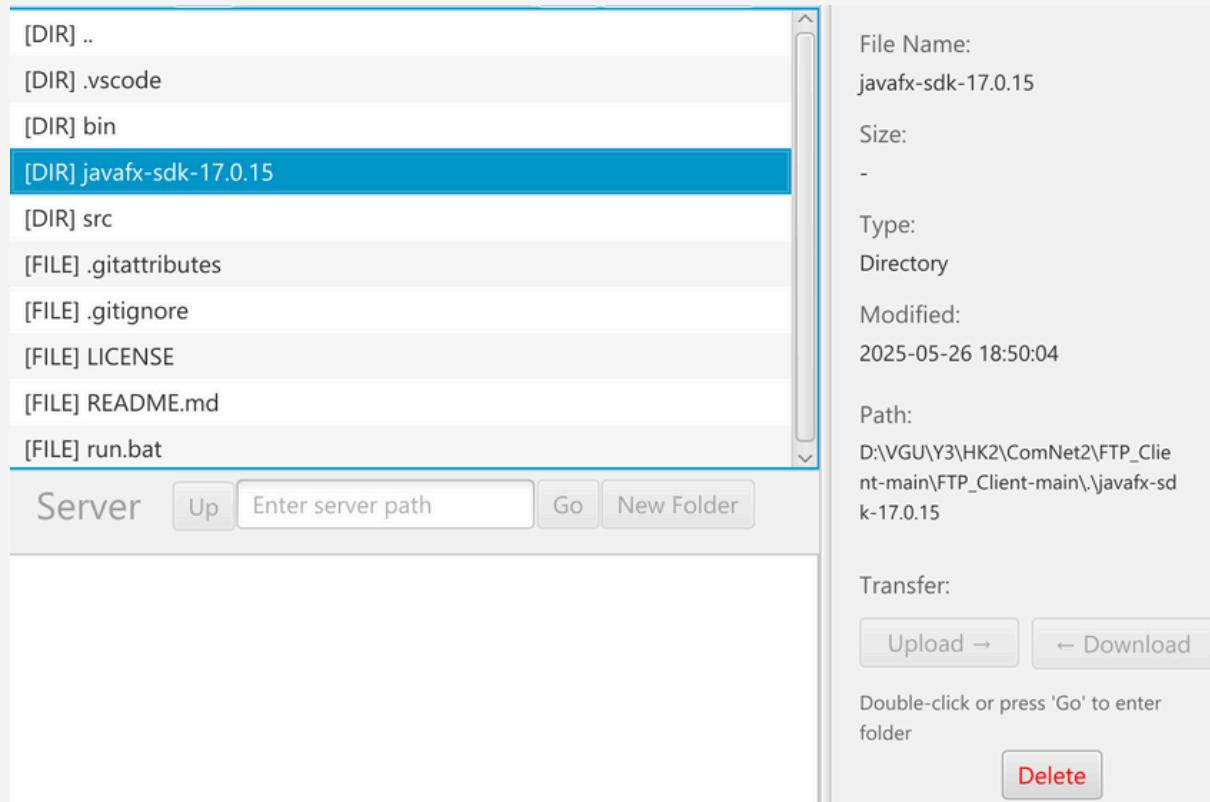
Path:

Server:

//10.101.1.2\_20250526-08234463\_IV  
A.jpg



# 5. File deletion



```
/*
 * Handles deletion of local files and directories
 * Shows confirmation dialog and performs recursive
 * deletion for directories
 */
private void handleDeleteLocal(String selectedItem) {
    // Prevent deletion of parent directory reference
    if (selectedItem.equals("[DIR] ..")) {
        leftStatusLabel.setText("Cannot delete parent
            directory");
        return;
    }

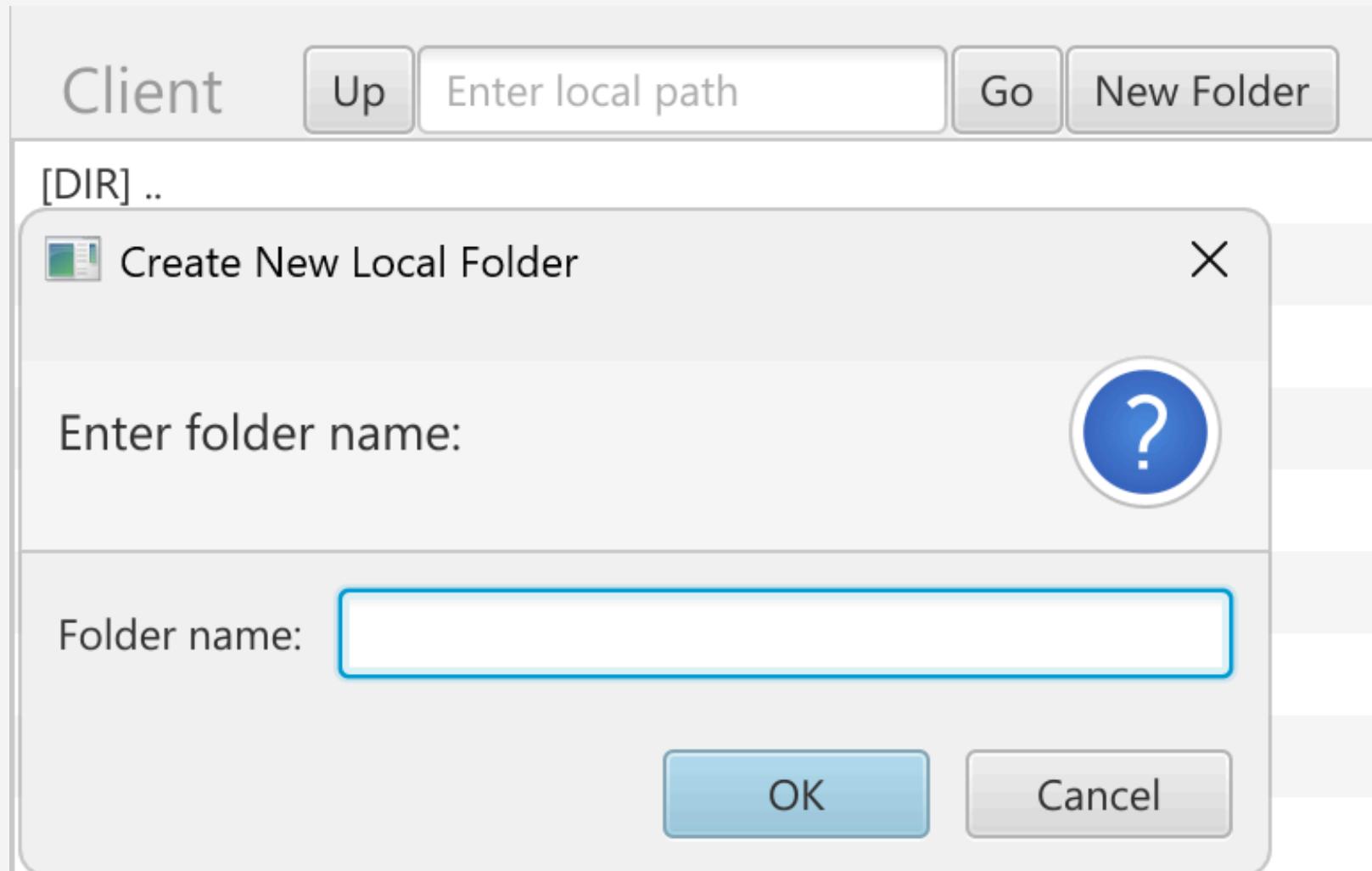
    String fileName = selectedItem.replaceFirst("^\\|["
        (DIR|FILE)\\] ", "");
    File file = new File(currentLocalDirectory,
        fileName);

    if (!file.exists()) {
        leftStatusLabel.setText("File not found: " +
            fileName);
        return;
    }
```

```
// Show confirmation dialog
Alert confirmAlert = new Alert(Alert.AlertType.CONFIRMATION);
confirmAlert.setTitle("Confirm Delete");
confirmAlert.setHeaderText("Delete " + (file.isDirectory() ?
    "folder" : "file") + "?");
confirmAlert.setContentText("Are you sure you want to delete \""
    + fileName + "?\" +
    (file.isDirectory() ? "\n\nThis can only delete an empty
        folder. \nDeleting a non-empty one will result in error."
        : ""));

Optional<ButtonType> result = confirmAlert.showAndWait();
if (result.isPresent() && result.get() == ButtonType.OK) {
    boolean success = deleteLocalFile(file);
    if (success) {
        leftStatusLabel.setText("Deleted: " + fileName);
        loadLocalFiles();
        clearFileDetails();
    } else {
        leftStatusLabel.setText("Failed to delete: " + fileName);
    }
}
```

# 6. Folder creation and deletion



The Server interface shows a file list and details for the directory '[DIR] FTP\_Client-main'. The details panel on the right shows:

- File Name: FTP\_Client-main
- Size: -
- Type: Directory
- Modified: 2025-05-26 20:31:04
- Path: D:\VGU\Y3\HK2\ComNet2\FTP\_Client-main\FTP\_Client-main

The file list table has columns: permissions, last modified, size, date, and name. It contains the following entries:

-rw-r--r--	1	1001	1001	0 May 26 13:30 10.101.1.2_20250526
-rw-r--r--	1	1001	1001	0 May 26 13:30 10.101.1.2_20250526
-rw-r--r--	1	1001	1001	128210 May 26 13:30 10.101.1.2_20250526
-rw-r--r--	1	1001	1001	128656 May 26 13:30 10.101.1.2_20250526
-rw-r--r--	1	1001	1001	0 May 26 13:30 10.101.1.2_20250526
-rw-r--r--	1	1001	1001	0 May 26 13:31 10.101.1.2_20250526
-rw-r--r--	1	1001	1001	46 May 26 13:30 2025052619004214
-rw-r--r--	1	1001	1001	958 May 26 13:30 BunkerEastProdPro
-rw-r--r--	1	1001	1001	958 May 26 13:30 BunkerWestProdPro

Buttons at the bottom include 'Upload →', '← Download', and a red 'Delete' button.

# 7. File download

Server    Up    Enter server path    Go    New Folder

-rw-r--r--	1	1001	1001	127887	May 26 14:10	10.101.1.2_20250526-10104767_IVA.jpg
-rw-r--r--	1	1001	1001	138549	May 26 14:10	10.101.1.2_20250526-10104767_IVA.jpg
-rw-r--r--	1	1001	1001	0	May 26 14:10	10.101.1.2_20250526-10104767_IVA.jpg
-rw-r--r--	1	1001	1001	128704	May 26 14:10	10.101.1.2_20250526-10104767_IVA.jpg
-rw-r--r--	1	1001	1001	127849	May 26 14:10	10.101.1.2_20250526-10104767_IVA.jpg
-rw-r--r--	1	1001	1001	0	May 26 14:10	10.101.1.2_20250526-10104767_IVA.jpg
-rw-r--r--	1	1001	1001	0	May 26 14:10	10.101.1.2_20250526-10104767_IVA.jpg
-rw-r--r--	1	1001	1001	127764	May 26 14:11	10.101.1.2_20250526-10104767_IVA.jpg
drwxr-xr-x	3	1001	1001	18	May 26 14:10	Vorne

Client    Up    Enter local path    Go    New Folder

- [DIR] .vscode
- [DIR] bin
- [DIR] javafx-sdk-17.0.15
- [DIR] src
- [FILE] .gitattributes
- [FILE] .gitignore
- [FILE] 10.101.1.2\_20250526-10104767\_IVA.jpg
- [FILE] LICENSE
- [FILE] README.md
- [FILE] run.bat

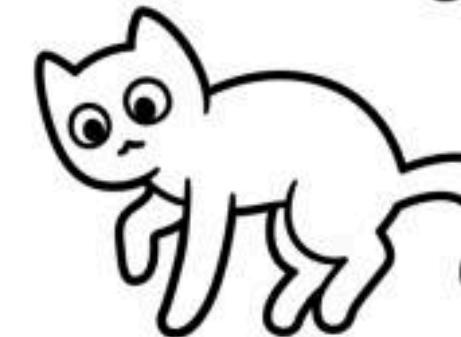
//10.101.1.2\_20250526-10104767\_IVA.jpg

Transfer:

Upload → ← Download

Download completed

Delete



# 8. File upload

Client    Up    Enter local path    Go    New Folder

[DIR] ..  
[FILE] launch.json  
[FILE] settings.json

Server    Up    Enter server path    Go    New Folder

File Type	Owner	Group	Last Modified	Path
-rw-r--r--	1	1001	1001	132905 May 26 14:52 10.101.1.2_20250526-10532406_IVA.jpg
-rw-r--r--	1	1001	1001	0 May 26 14:52 10.101.1.2_20250526-10532824_IVA.jpg
-rw-r--r--	1	1001	1001	0 May 26 14:52 10.101.1.2_20250526-10533645_IVA.jpg
-rw-r--r--	1	1001	1001	46 May 26 14:52 20250526202218611.csv
drwxr-xr-x	3	1001	1001	18 May 26 14:52 Vorne
-rw-r--r--	1	1001	1001	100000 May 26 14:50 _11477664
-rw-r--r--	1	1001	1001	100000 May 26 14:50 _11478021
-rw-r--r--	1	1001	1001	0 May 26 14:52 actorstoday.txt
-rw-r--r--	1	1001	1001	545 May 26 14:50 launch.json
-rw-r--r--	1	1001	1001	340 May 26 14:52 settings.json

Details

File Name: settings.json  
Size: 340 bytes  
Type: JSON File  
Modified: May 26 14:52  
Path: Server: //settings.json

Transfer:

Upload →    ← Download

Ready to download

Delete



# Thank you!

