Presentation Project: Chat System
-
GUI & File System

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Introduction

Have You Ever Experience Situations Like This ...

Introduction
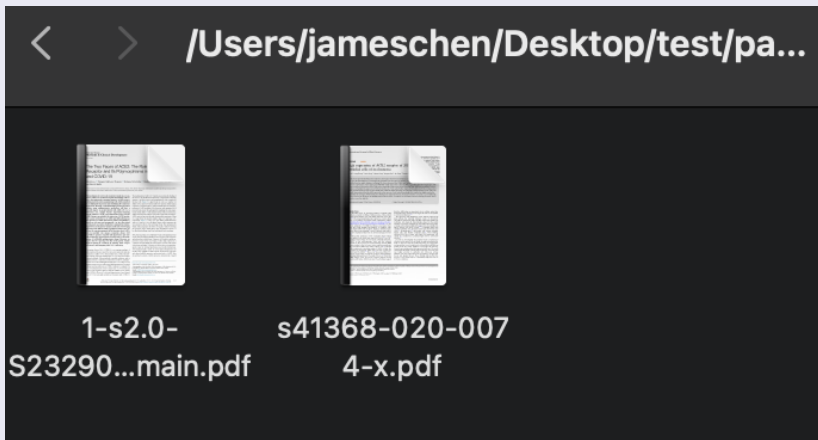
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Have You Ever Experience Situations Like This ...

Introduction

Our Modification to the Chat System

- Graphical User Interface
- FTP Server: File Upload & Download
- PDF Rename

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Graphical User Interface

Additional Buttons and Location Adjustment

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Graphical User Interface

Time Button

Time: 27.11.21,22:24

```python
import time

def layout(self,name):
    self.time = Button(self.labelBottom,
                       text = "Time",
                       font = "Helvetica 6 bold",
                       width = 20,
                       bg = "#ABB2B9",
                       command = lambda :  self.showtime())
def showtime(self):
    self.textCons.config(state = NORMAL),
    self.textCons.insert(END,'Time: '+time.strftime('%d.%m.%y,%H
    self.textCons.config(state = DISABLED)
    self.textCons.see(END)
```

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Connect Button

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Graphical User Interface

Connect Button

Graphical User Interface

Connect Button

```python
def layout(self,name):
    self.connect = Button(self.labelBottom,
                          text = "Connect",
                          font = "Helvetica 6 bold",
                          width = 20,
                          bg = "#ABB2B9",
                          command = lambda : self.showconnect())
def showconnect(self):
    if self.entryMsg.get()=='':
        self.my_msg= 'who'
    else:
        target=self.entryMsg.get()
        self.my_msg= 'c '+target
    self.entryMsg.delete(0, END)
```

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Graphical User Interface

Leave Button

Graphical User Interface

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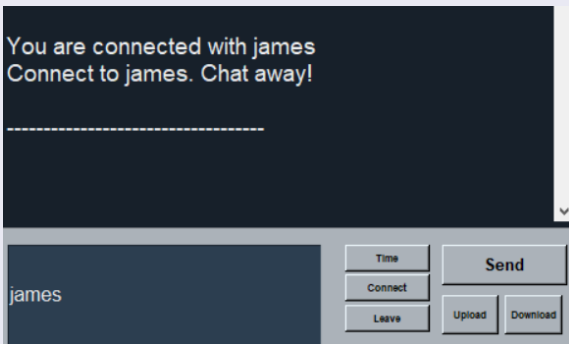
Leave Button

```
1  def layout(self,name):
2      self.leave = Button(self.labelBottom,
3                          text = "Leave",
4                          font = "Helvetica 6 bold",
5                          width = 20,
6                          bg = "#ABB2B9",
7                          command = lambda : self.sendButton('bye'
```
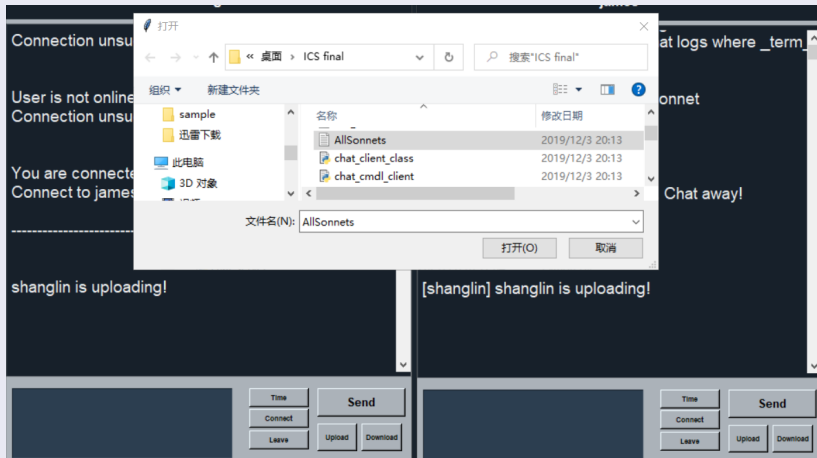
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Graphical User Interface

Upload Button

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Graphical User Interface

Upload Button

```
1  import os
2  import tkinter as tk
3  from tkinter import filedialog
4
5
6  def file_opener():
7      root = tk.Tk()
8      root.withdraw()
9      file_path = filedialog.askopenfilename()
10     return file_path
```

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FTP Server: File Upload & Download

Demo

See Video

FTP Server: File Upload & Download
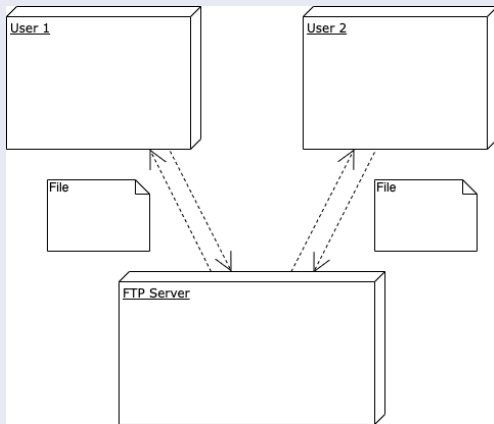
Structure

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FTP Server

```python
from pathlib import Path
from pyftpdlib.authorizers import DummyAuthorizer
from pyftpdlib.handlers import FTPHandler
from pyftpdlib.servers import FTPServer
def main():
    authorizer = DummyAuthorizer()
    # Now stored in local file folder
    # "/Users/jameschen/Desktop/" "D:\upload"
    home_path = Path(__file__).parent / 'files'
    home_path.mkdir(parents=True, exist_ok=True) # make new fold
    authorizer.add_user("Admin", "Admin", str(home_path), perm='
    handler = FTPHandler
    handler.authorizer = authorizer
    server = FTPServer(('0.0.0.0', 8888), handler)
    server.serve_forever()
```

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Threading (in chat_server)

```
1  from threading import Thread
2  import file_server
3
4  def main():
5      Thread(target=file_server.main).start()
6      server = Server()
7      server.run()
```

FTP Server: File Upload & Download

Upload (in GUI)

```python
1  import os
2  import tkinter as tk
3  from tkinter import filedialog
4
5
6  def file_opener():
7      root = tk.Tk()
8      root.withdraw()
9      file_path = filedialog.askopenfilename()
10     return file_path
```

FTP Server: File Upload & Download

Download (in GUI)

```python
def download(path=str(Path(__file__).parent / 'user_files' / 'us
    """all files on server are stored in path folder"""
    path = Path(path)
    path.mkdir(parents=True, exist_ok=True)
    ftp = ftpconnect()
    for filename in ftp.nlst():
        with open(path / filename, "wb") as f:
            ftp.retrbinary('RETR %s' % filename, f.write)
    ftp.quit()

class GUI:
    def download_for_current_user():
        download(str(Path(__file__).parent / 'user_files' /
```

PDF Rename

PDF Rename: Library

```
1  import os
2  from PyPDF2 import  PdfFileReader
3  from shutil import copy2
4  from pathlib import Path
5
6  src_dir = Path(__file__).parent/"papers_oldDir"        #L
7  des_dir = Path(__file__).parent/'papers_newDir'
```
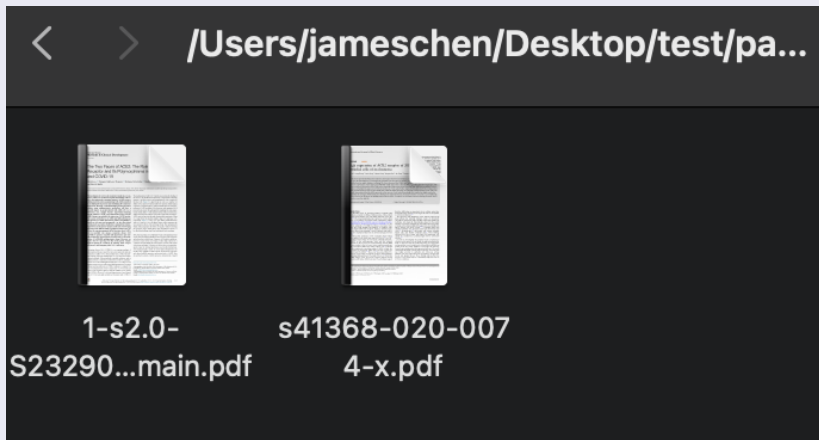
PDF Rename

PDF Rename: File Process

```
1   if not os.path.exists(des_dir):#if no, creat one
2       os.makedirs(des_dir)
3
4   if os.path.exists(src_dir):
5       dirs = os.listdir(src_dir)
6       for dirc in dirs:
7           pdf_reader = PdfFileReader(open(os.path.join(src_dir, di
8           paper_title = pdf_reader.getDocumentInfo().title
9           print("num : %s" % num , paper_title)
10          num += 1
11          paper_title = str(paper_title)
```

PDF Rename

PDF Rename: Demo – Before

PDF Rename

PDF Rename: Demo – After

Acknowledgments

References

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