## FILE UPLOAD & FILE DOWNLOAD

BY: Kaiyi Li

Jiayue Tu

## **CLOUD STORAGE SERVICES**





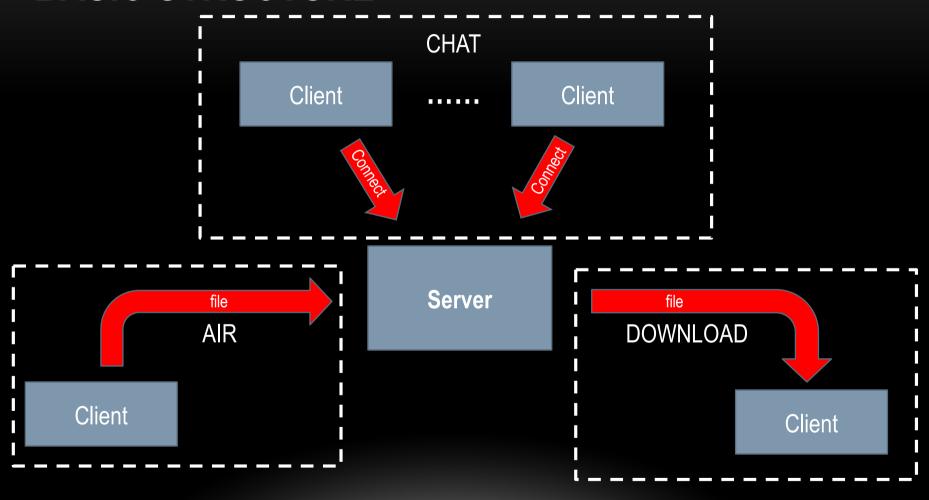




## **CLOUD STORAGE SERVICES**

- 1990s Online Backup Storage
- 1994 AT&T PersonaLink
- 2006 Amazon AWS S3
- 2008 Dropbox Personal Cloud Storage
- 2012 Google Google Drive

## **BASIC STRUCTURE**



## LOGIC

#### **Socket Construction**

```
def main():
    #Build the socket
    s = socket.socket()
    #s.bind(('10.209.7.72',9969))
    s.bind(('localhost',9969))
    s.listen(10)
    sc, address = s.accept()
    print("Socket Construction Compelete")
    #signal received
    msg = sc.recv(1024)
    #print(type(msg))
    print(msg.decode('utf-8'))
    #processing the option and initialize correspond server
```

### LOGIC

#### Main Server

```
if msg.decode('utf-8') == 'Chat':
    #preparing the chat
    rep = "signal from server".encode('utf-8')
    sc.send(bytes(rep))
    print("Reponse sent by server")
    server = Server()
    server.running()
    #Sent the response tell client that the server is ready.
```

#### Main Client

```
elif sig[0:8] == 'Download':
        path = 'Downloaded'
        path += sig.split('/')[1]
        receivedByClient(path)
# rep = s.recv(1024)
# print(rep.decode('utf-8'))
```

## LOGIC

#### file\_transfer server

```
import socket
def fileServer(path):
    s = socket.socket()
    s.bind(("localhost", 9999))
    #s.bind(("10.209.7.72", 9999))
    s.listen(10)
    print("ula")
    sc, address = s.accept()
    f = open(path, 'wb') #open in binary
    1 = sc. recv(1024)
    while (1):
            f.write(1)
            1 = sc. recv(1024)
            if(len(1) == 0):
                break
    print ("serverDonetoo")
    f.close()
    sc.close()
    s.close()
```

#### file\_transfer client

```
import socket
def fileClient(path):
    so = socket.socket()
    so.connect(("localhost", 9999))
    print("DoneSocket")
    f = open (path, "rb")
    l = f.read(1024)
    while (l):
        print("Uploading")
        so.send(l)
        l = f.read(1024)

#1.close()
    so.close()
    print("Done")
```

## **IMPROVEMENTS**

- Constant Server
- Run multiple functions at the same time

# THANKS FOR WATCHING!