

# Class UDPServer

```
java.lang.Object
  java.lang.Thread
    UDPServer
```

## All Implemented Interfaces:

```
Runnable
```

```
public class UDPServer
  extends Thread
```

This class is waiting to receive a message from a client using UDP protocol and then starting a new UDP thread to handle the response. The response is forwarding the message to all of the clients or disconnecting the client.

## Nested Class Summary

### Nested classes/interfaces inherited from class java.lang.Thread

```
Thread.State, Thread.UncaughtExceptionHandler
```

## Field Summary

### Fields

| Modifier and Type      | Field and Description   |
|------------------------|---|
| private int            | <b>bufSize</b><br>the size of the buf for datagram packets                                |
| private DatagramSocket | <b>datagramSocket</b><br>The socket to accept client connections                          |
| private MainServer     | <b>mainServer</b><br>The object to access the main server class                           |
| private ServerGUI      | <b>serverGUI</b><br>the object to access the GUI for the server to update the client list |

## Fields inherited from class java.lang.Thread

MAX\_PRIORITY, MIN\_PRIORITY, NORM\_PRIORITY

## Constructor Summary

### Constructors

#### Constructor and Description

**UDPServer**(**DatagramSocket** datagramSocket, MainServer mainServer, ServerGUI serverGUI)

The constructor which is storing the socket the client is communicating through and the object to access the main web server

## Method Summary

### All Methods    Instance Methods    Concrete Methods

| Modifier and Type | Method and Description   |
|-------------------|--|
| void              | <b>run</b> ()<br><br>This method is called when the thread is started in the constructor of the main server class. |

## Methods inherited from class java.lang.Thread

activeCount, checkAccess, clone, countStackFrames, currentThread, destroy, dumpStack, enumerate, getAllStackTraces, getContextClassLoader, getDefaultUncaughtExceptionHandler, getId, getName, getPriority, getStackTrace, getState, getThreadGroup, getUncaughtExceptionHandler, holdsLock, interrupt, interrupted, isAlive, isDaemon, isInterrupted, join, join, join, resume, setContextClassLoader, setDaemon, setDefaultUncaughtExceptionHandler, setName, setPriority, setUncaughtExceptionHandler, sleep, sleep, start, stop, stop, suspend, toString, yield

## Methods inherited from class java.lang.Object

equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

## Field Detail

### datagramSocket

```
private DatagramSocket datagramSocket
```

The socket to accept client connections

### mainServer

```
private MainServer mainServer
```

The object to access the main server class

### serverGUI

```
private ServerGUI serverGUI
```

the object to access the GUI for the server to update the client list

### bufSize

```
private final int bufSize
```

the size of the buf for datagram packets

#### See Also:

[Constant Field Values](#)

## Constructor Detail

### UDPServer

```
public UDPServer(DatagramSocket datagramSocket,  
                 MainServer mainServer,  
                 ServerGUI serverGUI)
```

The constructor which is storing the socket the client is communicating through and the object to access the main web server

#### Parameters:

`datagramSocket` - The socket UDP clients will connect to  
`mainServer` - Object to access the main server

### ***Method Detail***

#### **run**

```
public void run()
```

This method is called when the thread is started in the constructor of the main server class. It waits to receive a message from a UDP client and then starts a new thread to handle disconnecting the client or forwarding the clients message

**Specified by:**

`run` in interface `Runnable`

**Overrides:**

`run` in class `Thread`