client

# Class TCPClient

java.lang.Object
    client.TCPClient

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```
class TCPClient
extends java.lang.Object
```

**Author:**

hector, adonias, gary, henna. This class will contain the components of the client. The
components consist of the Runtime thread, the upper threads, the local thread, and the
network thread. Uthreads will communicate with runtime threads to queue requests for
information and unqueue responses. The runtime thread will deploy requests by spawning
either local or network threads and then unqueueing the requests. The spawned local or
network thread will execute the request, update response and then queue the response. A
data class will contain the request type and all relevant information to identify the
requesting uthread. Each uthread will send 20 requests and wait for their response on each
iteration.

## Nested Class Summary

### Nested Classes

| Modifier and Type | Class and Description |
|---|---|
| (package private) static class | **TCPClient.localThr** |
| (package private) static class | **TCPClient.networkThr** |
| static class | **TCPClient.runtimeThr** |
| (package private) static class | **TCPClient.uThr** |

## Field Summary

### Fields

| Modifier and Type | Field and Description |
|---|---|
| static **TCPClient.runtimeThr** | **runtime**<br>Runtime thread object. |
| (package private) static java.util.ArrayList<**TCPClient.uThr**> | **upperThreads** |

| | These are the uThreads that will determine the data request type. |
| --- | --- |

## Constructor Summary

| Constructors |
| --- |
| **Constructor and Description** |
| TCPClient() |

## Method Summary

| All Methods | Static Methods | Concrete Methods |
| --- | --- | --- |

| Modifier and Type | Method and Description |
| --- | --- |
| static void | main(java.lang.String[] argv)<br><br>The main function will start the runtime thread and initialize 8 upper threads, storing each within the ArrayList of upper threads. |

| Methods inherited from class java.lang.Object |
| --- |
| clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait |

## Field Detail

### runtime

public static TCPClient.runtimeThr runtime

Runtime thread object. This is declared as global in order to interract with the various levels of the client.

### upperThreads

static java.util.ArrayList<TCPClient.uThr> upperThreads

These are the uThreads that will determine the data request type. The data request type will be nextEven, nextOdd, nextLargeRand, nextFibb, nextPrime.

## Constructor Detail

## TCPClient

TCPClient()

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## *Method Detail*

### main

```
public static void main(java.lang.String[] argv)
                throws java.lang.Exception
```

The main function will start the runtime thread and initialize 8 upper threads, storing each within the ArrayList of upper threads. The upper threads will be immediately started after their initialization.

**Parameters:**

argv - - default string array

**Throws:**

java.lang.Exception - - thread runtime exceptions.

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