

ButlerApplication => Child Thread 1

HotelApplication => Main Thread (Parent Thread)

GuestApplication => Child Thread 2

AdminApplication => Child Thread 3

The main method is called the main thread at runtime.

?

Thread class => java.lang.*;

[Thread \(Java SE 20 & JDK 20 \[build 1\]\)](#)

Module java.base
Package java.lang

Class Thread

java.lang.Object
java.lang.Thread

All Implemented Interfaces:
Runnable

Direct Known Subclasses:
ForkJoinWorkerThread

```
public class Thread
extends Object
implements Runnable
```

A *thread* is a thread of execution in a program. The Java virtual machine allows an application to have multiple threads of execution running concurrently.

Thread defines constructors and a `Thread.Builder`^{PREVIEW} to create threads. Starting a thread schedules it to execute its `run` method. The newly started thread executes `run` until it has completed execution. The `join` method can be used to wait for a thread to terminate.

A thread *terminates* if either its `run` method completes normally, or if its `run` method completes abruptly and the appropriate `uncaught exception handler` completes normal to run, the thread has completed execution. The `join` method can be used to wait for a thread to terminate.

Threads have a unique identifier and a name. The identifier is generated when a `Thread` is created and cannot be changed. The thread name can be specified when creating later time.

Threads support `ThreadLocal` variables. These are variables that are local to a thread, meaning a thread can have a copy of a variable that is set to a value that is independent of other threads. Thread also supports `InheritableThreadLocal` variables that are thread local variables that are inherited at Thread creation time from the parent Thread. Thread also supports `ThreadLocal` variables that are thread local for the thread context-class-loader.

Platform threads

```
package com.hotel;
```

Hotel

Butler

Admin

Guest

Runnable => run()

