package com.twitter.search.earlybird.util;

import java.util.concurrent.TimeUnit;

/\*\*

\* Specifies timing and type of period actions that we schedule.

\*

\* See:

\* https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/ScheduledExecutorService.html

\*/

public final class PeriodicActionParams {

private enum DelayType {

FIXED\_DELAY,

FIXED\_RATE

}

private long initialDelayDuration;

private long intervalDuration;

private TimeUnit intervalUnit;

private DelayType delayType;

public long getInitialDelayDuration() {

return initialDelayDuration;

}

public long getIntervalDuration() {

return intervalDuration;

}

public TimeUnit getIntervalUnit() {

return intervalUnit;

}

public DelayType getDelayType() {

return delayType;

}

private PeriodicActionParams(

DelayType delayType,

long initialDelayDuration,

long intervalDuration,

TimeUnit intervalUnit) {

this.delayType = delayType;

this.intervalDuration = intervalDuration;

this.initialDelayDuration = initialDelayDuration;

this.intervalUnit = intervalUnit;

}

// Runs start at times start, start+X, start+2\*X etc., so they can possibly overlap.

public static PeriodicActionParams atFixedRate(

long intervalDuration,

TimeUnit intervalUnit) {

return new PeriodicActionParams(DelayType.FIXED\_RATE, 0,

intervalDuration, intervalUnit);

}

// Delay between every run.

// The order of what happens is:

// initial delay, run task, wait X time, run task, wait X time, etc.

// Runs can't overlap.

public static PeriodicActionParams withIntialWaitAndFixedDelay(

long initialDelayDuration,

long intervalDuration,

TimeUnit intervalUnit) {

return new PeriodicActionParams(DelayType.FIXED\_DELAY, initialDelayDuration,

intervalDuration, intervalUnit);

}

// Delay between every run.

public static PeriodicActionParams withFixedDelay(

long intervalDuration,

TimeUnit intervalUnit) {

return withIntialWaitAndFixedDelay(0, intervalDuration, intervalUnit);

}

boolean isFixedDelay() {

return this.delayType == DelayType.FIXED\_DELAY;

}

}