**//time taken for processing multiple thread at the same time by giving accumulation time taken by different workers**

package worker;

import java.util.ArrayList;

import java.util.Date;

import java.util.List;

public class Worker implements Runnable

{

public boolean running = false;

public Worker ()

{

Thread thread = new Thread(this);

thread.start();

}

public static void main (String[] args) throws InterruptedException

{

List<Worker> workers = new ArrayList<Worker>();

System.out.println("This is currently running on the main thread, " +

"the id is: " + Thread.currentThread().getId());

Date start = new Date();

// start 5 workers

for (int i=0; i<5; i++)

{

workers.add(new Worker());

}

// We must force the main thread to wait for all the workers

// to finish their work before we check to see how long it

// took to complete

for (Worker worker : workers)

{

while (worker.running)

{

Thread.sleep(100);

}

}

Date end = new Date();

long difference = end.getTime() - start.getTime();

System.out.println ("This whole process took: " + difference/1000 + " seconds.");

}

@Override

public void run()

{

this.running = true;

System.out.println("This is currently running on a separate thread, " +

"the id is: " + Thread.currentThread().getId());

try

{

// this will pause this spawned thread for 5 seconds

// (5000 is the number of milliseconds to pause)

// Also, the Thread.sleep() method throws an InterruptedException

// so we must "handle" this possible exception, that's why I've

// wrapped the sleep() method with a try/catch block

Thread.sleep(5000);

}

catch (InterruptedException e)

{

// As user Bernd points out in the comments section below, you should

// never swallow an InterruptedException.

Thread.currentThread().interrupt();

}

this.running = false;

}

}

This is currently running on the main thread, the id is: 1

This is currently running on a separate thread, the id is: 8

This is currently running on a separate thread, the id is: 9

This is currently running on a separate thread, the id is: 10

This is currently running on a separate thread, the id is: 11

This is currently running on a separate thread, the id is: 12

This whole process took: 5 seconds.

BUILD SUCCESSFUL (total time: 5 seconds)