//Reference: <https://www.youtube.com/watch?v=GURClZeR96E&t=662s>

package com.sdsu.edu;

import java.rmi.registry.LocateRegistry;

import java.rmi.registry.Registry;

import java.util.concurrent.ConcurrentHashMap;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.JScrollPane;

import javax.swing.JTextArea;

public class Notification {

public static void main(String[] args)

{

try

{

//Returns a reference to the remote object Registry on the specified host and port.

Registry reg= LocateRegistry.getRegistry("127.0.0.1",1099);

MessageInterface mi=(MessageInterface)reg.lookup("vkbind");

int z=0,count=0;

//a jframe is used inside which the textarea is used

JFrame jframe = new JFrame();

JPanel jp=new JPanel();

//the message is displayed in this textarea

JTextArea jta = new JTextArea(60,50);

jframe.setSize(600, 600);

//this is used to set the jframe in the middle

jframe.setLocationRelativeTo(null);

//i am setting the title of the jframe to advisor

jframe.setTitle("NOTIFICATION");

//this is used to add the scrollbar to textarea

JScrollPane scroll = new JScrollPane(jta,JScrollPane.VERTICAL\_SCROLLBAR\_ALWAYS, JScrollPane.HORIZONTAL\_SCROLLBAR\_ALWAYS);

scroll.setViewportView(jta);

//i am adding the scrollbar to jframe

jframe.add(scroll);

//the textarea should not be allowed to be edited

jta.setEditable(false);

jp.add(jta);

jframe.add(jp);

//we are setting the jframe to visible

jframe.setVisible(true);

System.out.println("------------NOTIFICATION PROCESS STARTED---------");

while(z==0)

{

//we get the advisor response from the queue

ConcurrentHashMap<String, String> h=mi.getAdvisorResponse();

//we check whether there are any responses

if(h.size()!=0)

{

//for each course we display the decision

for ( String key : h.keySet() ) {

// when this class gets executed for the first time then count will be 0 and we can create a new textarea else we will append the message to the existing textarea

if(count==0)

{

jta.setText("COURSE NAME: '"+key+"' ADVISOR DECISION: '"+h.get(key)+"' \n");

System.out.println("");

System.out.println("COURSE NAME: "+key);

System.out.println("ADVISOR DECISION: "+h.get(key));

count++;

}

else

{

jta.append("COURSE NAME: '"+key+"' ADVISOR DECISION: '"+h.get(key)+"' \n");

System.out.println("");

System.out.println("COURSE NAME: "+key);

System.out.println("ADVISOR DECISION: "+h.get(key));

}

}

}

else

{

long start = System.currentTimeMillis();

long end = start + 7\*1000; // 7 seconds

//the control stays inside the loop for 7 seconds

while (System.currentTimeMillis() < end)

{}

//if there are no responses the control goes in to this loop

if(count==0)

{

count++;

jta.setText("WAITING FOR THE RESPONSE FROM ADVISOR PROCESS. \n");

System.out.println("");

System.out.print("WAITING FOR THE RESPONSE FROM ADVISOR PROCESS.");

}

else

{

jta.append("WAITING FOR THE RESPONSE FROM ADVISOR PROCESS. \n");

System.out.println("WAITING FOR THE RESPONSE FROM ADVISOR PROCESS.");

}

}

}

}

catch(Exception e)

{

e.printStackTrace();

}

}

}