Darbo autorius Justinas Meškauskas 1 b (2017-05-17)

Pamokos su Java (Java eclipse)

Temos

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Ciklas DoWhile +

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Programų pavyzdžiai (atviras kodas)

Java: Catch ir try blokai (panasiai kaip if‘ai)

```
//Iveda sveikaji skaiciu  ir ji parodo ekrane.
//Kitu atvejurodo pranesima "Jus ivedate ne sveikaji skaiciu"
import java.io.*;
public class Skaicius {
 public static void main (String args []) throws IOException {
                BufferedReader klavetura = new BufferedReader(new
                                                InputStreamReader(System.in));
                String reiksme;
                int x = 0;
               System.out.println("Iveskite reiksme");
               reiksme = klavetura.readLine(); //skaito eilute
               try {
                                x = Integer.parseInt(reiksme);
                                                                //vercia simbolius i skaiciu
```

```
                    System.out.println("ivedete skaiciu " + x);
            } catch (NumberFormatException e) {
                    System.out.println("Jus ivedate ne sveikaji skaiciu");
                    }
            System.out.println("Pabaiga");
            }
}
```

Sudetinis if'as

```
public class pagrindine {
	public static void main(String args[]){
		int amzius = 15; //keiciame amziu ir keiciasi atsakymai

		if(amzius>=18) {
			System.out.println("Jus esate pilnametis");
		} else if (amzius>=14 &&amzius<18){
			System.out.println("Jus galite pirkti fejerverkus");

		} else if (amzius >50&&amzius<80){
			System.out.println("Jus gaunate pencija");
		} else{
			System.out.println("Neturiu apie jus ka pasakyti");
		}
	}
}
```

ZAIDIMAS

```
import java.awt.*;
import java.applet.*;
import java.util.Timer;
import java.util.TimerTask;
import java.awt.event.*;



public class game extends Applet implements MouseListener,MouseMotionListener,
KeyListener
{
	/**
	 *
	 */
	private static final long serialVersionUID = 1L;

	Timer timer;

	int [] ball = {50, 75};
	int [] ball_vel = {2, 5};
	int refreshRate = 100;
	int ballSize = 20;

	int [] mouse = {0, 0};

	int size = 200;
	int rect_left = 5;
	int rect_top = 5;
	int rect_right = rect_left + size;
	int rect_bottom = rect_top + size;

	int paddle_widht = 10;
	int paddle_height = 40;
	int paddle_y = 80;

	int left_gutter = rect_left +paddle_widht;
	int right_gutter = rect_right - paddle_widht;
```

```
	public void init()
	{
			setSize(300, 300);
			//addMouseListener(this);
			//addMouseMotionListener(this);
			addKeyListener(this);

			timer = new Timer();

			timer.schedule(new TimerTask()
			{
					public void run()
					{
							//kas ivyks
							ballBounce();
							repaint();
					}
			},0,refreshRate);
	}
	public void ballBounce()
	{
	ball[0] = ball[0] + ball_vel[0];
	ball[1] = ball[1] + ball_vel[1];

			if(ball[0] <= left_gutter)
					{
					if(ball[1]+ballSize/2 >= paddle_y && ball[1]-
ballSize/2 <= paddle_y+paddle_height)
					{
							ball_vel[0] = -ball_vel[0];
					} else {
							timer.cancel();
					}

					}
			if(ball[0] >= right_gutter - ballSize)
			{
					ball_vel[0] = -ball_vel[0];
			}
			if(ball[1] <= rect_top)
			{
					ball_vel[1] = -ball_vel[1];
			}
			if(ball[1] >= rect_bottom - ballSize)
			{
			ball_vel[1] = -ball_vel[1];
			}

	}
	public void paint(Graphics g)
	{
			g.setColor(Color.black);
			g.drawRect(rect_left, rect_top, size, size);

			g.setColor(Color.MAGENTA);
			g.fillOval(ball[0], ball[1], 20, 20);
```

```
                        g.setColor(Color.BLUE);
                        g.drawLine(left_gutter, rect_top, left_gutter, rect_bottom);
                        g.drawLine(right_gutter, rect_top, right_gutter, rect_bottom);

                        g.setColor(Color.CYAN);
                        g.fillRect(rect_left, paddle_y, paddle_widht, paddle_height);

                        //g.setColor(Color.RED);
                        //g.fillRect(mouse[0]-10, mouse[1]-10, 20, 20);


                }


                public void mouseMoved(MouseEvent e) {
                        //mouse[0] = e.getX();
                        //mouse[1] = e.getY();
                        //repaint();
                }

                public void mouseClicked(MouseEvent e) {
                        mouse[0] = e.getX();
                        mouse[1] = e.getY();

                        //if(mouse[0]+10 >= ball[0] && mouse[0]-10 <= ball[0]+ballSize
        && mouse[1]+10 >= ball[1] && mouse[1]-10 <= ball[1]+ballSize)
                        //{
                        //          timer.cancel();
                        //}

                        repaint();

                }
                @Override
                public void mouseDragged(MouseEvent arg0) {
                        // TODO Auto-generated method stub

                }
                @Override
                public void mouseEntered(MouseEvent arg0) {
                        // TODO Auto-generated method stub

                }
                @Override
                public void mouseExited(MouseEvent arg0) {
                        // TODO Auto-generated method stub

                }
                @Override
                public void mousePressed(MouseEvent arg0) {
                        // TODO Auto-generated method stub

                }
                @Override
                public void mouseReleased(MouseEvent arg0) {
                        // TODO Auto-generated method stub

                }
```

```
		public void keyPressed(KeyEvent e)
		{
			if (e.getKeyCode() == e.VK_W)
			{
				if(paddle_y-5 >= rect_top)
				{
					paddle_y = paddle_y -5;
				}

			}
			if (e.getKeyCode() == e.VK_S)
			{
				if(paddle_y+5 <= rect_bottom-paddle_height)
				{
					paddle_y = paddle_y +5;
				}

			}
			repaint ();
		}

		public void keyReleased(KeyEvent e)
		{


		}
		@Override
		public void keyTyped(KeyEvent arg0) {
			// TODO Auto-generated method stub

		}


}
```

DO While

```
package doWhile;
//Atlieka veiksma ir poto tikrina salyga doWhile
public class doWhile {
		public static void main (String args[]) {

			int amzius = 14;
			int suma = 0;

			do{
				suma+=100; //daro sita
				amzius++;
			}while(amzius<=18); //poto tikrina sita
			System.out.println(suma);
		}
}
```

Ciklas While

```
public class CiklasWhile {
		public static void main(String []args){
			int amzius = 7;
			int suma = 0; //pradine
```

```
                    while (amzius<=18){  //kol sitas bus nuo 7 metu iki 18 +50
                                suma = suma + 50;  //vyks sitas
                                amzius++;


                    }
                    System.out.println(suma);
          }
}
```

FOR ciklas

```
class buttons {
    public static void main(String args[]){
         for(int i=10; i>1; i--){
              System.out.println("Skaicius yra: "+i);
         }
    }
}
```

Isejimas is ciklo

```
public class CiklasWhile {
          public static void main(String []args){
                    int amzius = 7;
                    int suma = 0; //pradine

                    while (amzius<=18){  //kol sitas bus nuo 7 metu iki 18 +50
                                suma = suma + 50;  //vyks sitas
                                amzius++;

                                break;
                    }
                    System.out.println(suma);
          }
}
```

IF else

```
import java.util.Scanner;
public class if_else{
          private static Scanner obuolys;

          public static void main(String args[]){
                    obuolys = new Scanner(System.in);
                    System.out.println("Iveskite X");
                    int x = obuolys.nextInt();


                    if(x>=18) {
                                System.out.println("x yra daugiau uz 18");
                    } else if (x>=14 &&x<18){
```

```
                                    System.out.println("X daugiau uz 14 bet maziau uz 18
");
                        }
            }
}


            }
}
```

Masyvas ,Surasti masyve maziausia

```
import java.util.Arrays;
import java.util.Scanner;
class Masyvai {

  public static void main(String args[]){


              Scanner input = new Scanner(System.in);

              int array[] = new int[10];

              System.out.println("Iveskite skaicius");

              for (int i = 0; i < array.length; i++) {
                  int next = input.nextInt();

                  if (next == 999) {
                      break;
                  }
                  array[i] = next;

                  getMaxValue(array);

                  getMinValue(array);
              }
              System.out.println("Didziausias skaicius");
              System.out.println(getMaxValue(array));
              System.out.println("Maziausias skaicius skaicius");
              System.out.println(getMinValue(array));
  }


              public static int getMaxValue(int[] array) {
                  int maxValue = array[0];
                  for (int i = 1; i < array.length; i++) {
                      if (array[i] > maxValue) {
                          maxValue = array[i];
                      }
                  }
                  return maxValue;
              }


              public static int getMinValue(int[] array) {
```

```
            int minValue = array[0];
            for (int i = 1; i < array.length; i++) {
                if (array[i] < minValue) {
                    minValue = array[i];
                }
            }
            return minValue;
        }


        public static void printArray(int arr[]) {
            int n = arr.length;

            for (int i = 0; i < n; i++) {


            }
        }
    }
```

Ismesti masyvo elementa

Iterpti masyvo elementa

```
package arraylist;
import java.util.ArrayList;
public class arraylist {

        public static void main(String[] args) {
        int simple_array[] = new int[5];

        ArrayList<Integer> myList = new ArrayList<Integer>(5);
        myList.add(112);
        myList.add(220);
        myList.add(556);
        myList.add(7);
        myList.add(23);

        for (Integer x : myList)
                    System.out.println(x);

                    System.out.println("dydis = " +myList.size());
                    myList.trimToSize();

                    for (Integer x : myList)
                                System.out.println(x);
                    System.out.println("dydis = " +myList.size());
        }

}
```

Sudeti masyvo elementus

```
package sudetis_masyve;
import java.util.*;
```

```java
class masyvas
{


 public static void main(String args[])
 {

 Scanner s=new Scanner(System.in);
            int n=s.nextInt();
            int[] a=new int[n];
            int sum=0;

  for(int i=0;i<a.length;i++){
              a[i]=s.nextInt();
              sum+=a[i];
}
  System.out.println("Visu elementu suma yra:  "+sum);


 }


}
```