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# JAVA MINI PROJECT

## Project:

Quiz on some basics of computer science

## Concept used:

GUI, ImageIcon, awt, java swing, actionPerformed

## Code:

- **name.java**

```
• import javax.swing.*;
• import java.awt.event.*;
• import java.awt.*;
•
• public class name implements ActionListener
• {
•     JFrame f1;
•     JLabel l,name,img1;
•     JButton b ;
•     JTextField tf;
•
•     name()
•     {
•         f1 = new JFrame();
•         f1.setLayout(null);
•         f1.setTitle("DJSCE ADVANCED");
•         f1.setVisible(true);
•         f1.setSize(1000,600);
•         f1.setLocationRelativeTo(null);
•         f1.setBackground(Color.WHITE);
•
•         ImageIcon image1 = new
ImageIcon(getClass().getResource("images/first.png"));
•         img1 = new JLabel(image1);
```

```

•      img1.setBounds(0,0,650,500);
•      f1.add(img1);
•
•      l = new JLabel("Enter your Name");
•      l.setFont(new Font("Viner Hand ITC" , Font.BOLD , 20));
•      l.setForeground(Color.BLUE);
•      l.setBounds(700,150,300,20);
•      f1.add(l);
•
•      tf = new JTextField();
•      tf.setBounds(700,200,200,20);
•      f1.add(tf);
•
•      name = new JLabel("* PLEASE ENTER YOUR CORRECT NAME *");
•      name.setBounds(700,220,200,20);
•      name.setFont(new Font("Calibri" , Font.PLAIN , 10));
•      name.setForeground(Color.RED);
•      f1.add(name);
•
•
•
•
•      b = new JButton("SAVE & NEXT");
•      b.setBackground(Color.BLUE);
•      b.setForeground(Color.WHITE);
•      b.setBounds(800,350,120,20);
•      b.addActionListener(this);
•      f1.add(b);
•  }
•  public void actionPerformed(ActionEvent a)
•  {
•      String name = tf.getText();
•      f1.setVisible(false);
•      new rule(name);
•  }
•  public static void main(String [] z)
•  {
•      new name();
•  }
•  }

```

#### • quiz.java

```

•  import javax.swing.*;
•  import java.awt.event.*;
•  import java.awt.*;
•
•  public class quiz implements ActionListener
•  {
•      String question[][] = new String[5][5];

```

```

• String answer[] = new String[5];
• JFrame f2;
• JLabel img2,QNo,Question,verticalimg;
• JButton one,two,three,four,five,submit,save;
• JRadioButton op1,op2,op3,op4;
• ButtonGroup option;
• int q = 0;
• int solved = 0;
• String ans[] = new String[]{null , null , null , null , null} ;
• JLabel score;
• quiz()
• {
•     f2 = new JFrame();
•     f2.setVisible(true);
•     f2.setSize(1000,500);
•     f2.setLayout(null);
•     f2.setLocationRelativeTo(null);
•     f2.setBackground(Color.WHITE);
•     f2.setTitle("DJSCE ADVANCED");
•
•     ImageIcon image2 = new
ImageIcon(getClass().getResource("images/quiz.png"));
•     img2 = new JLabel(image2);
•     img2.setBounds(10,10,1500,400);
•     f2.add(img2);
•
•
•     QNo = new JLabel("1");
•     QNo.setBounds(120,450,20,40);
•     QNo.setFont(new Font("Quicksand" , Font.BOLD , 18));
•     f2.add(QNo);
•
•
•     Question = new JLabel();
•     Question.setBounds(150,450,800,40);
•     Question.setFont(new Font("Quicksand" , Font.BOLD , 18));
•     f2.add(Question);
•
•     op1 = new JRadioButton();
•     op1.setBounds(150,490,800,40);
•     op1.setFont(new Font("Quicksand" , Font.BOLD , 18));
•     op1.addActionListener(this);
•     f2.add(op1);
•
•     op2 = new JRadioButton();
•     op2.setBounds(150,530,800,40);
•     op2.setFont(new Font("Quicksand" , Font.BOLD , 18));
•     op2.addActionListener(this);

```

```

•         f2.add(op2);
•
•         op3 = new JRadioButton();
•         op3.setBounds(150,570,800,40);
•         op3.setFont(new Font("Quicksand" , Font.BOLD , 18));
•         op3.addActionListener(this);
•         f2.add(op3);
•
•         op4 = new JRadioButton();
•         op4.setBounds(150,610,800,40);
•         op4.setFont(new Font("Quicksand" , Font.BOLD , 18));
•         op4.addActionListener(this);
•         f2.add(op4);
•
•         option = new ButtonGroup();
•         option.add(op1);
•         option.add(op2);
•         option.add(op3);
•         option.add(op4);
•
•         ImageIcon vertical = new
ImageIcon(getClass().getResource("images/verticalline.png"));
•         verticalimg = new JLabel(vertical);
•         verticalimg.setBounds(1000,140,5,900);
•         f2.add(verticalimg);
•
•         one = new JButton("1");
•         one.setBounds(1100,500,40,40);
•         one.setBackground(Color.WHITE);
•         one.setForeground(Color.BLACK);
•         one.addActionListener(this);
•         f2.add(one);
•
•         two = new JButton("2");
•         two.setBounds(1200,500,40,40);
•         two.setBackground(Color.WHITE);
•         two.setForeground(Color.BLACK);
•         two.addActionListener(this);
•         f2.add(two);
•
•         three = new JButton("3");
•         three.setBounds(1300,500,40,40);
•         three.setBackground(Color.WHITE);
•         three.setForeground(Color.BLACK);
•         three.addActionListener(this);
•         f2.add(three);
•

```

```

•         four = new JButton("4");
•         four.setBounds(1100,550,40,40);
•         four.setBackground(Color.WHITE);
•         four.setForeground(Color.BLACK);
•         four.addActionListener(this);
•         f2.add(four);
•
•         five = new JButton("5");
•         five.setBounds(1200,550,40,40);
•         five.setBackground(Color.WHITE);
•         five.setForeground(Color.BLACK);
•         five.addActionListener(this);
•         f2.add(five);
•
•         submit = new JButton("EXIT");
•         submit.setBounds(1100,700,100,40);
•         submit.setBackground(Color.GREEN);
•         submit.setForeground(Color.BLACK);
•         submit.setEnabled(false);
•         submit.addActionListener(this);
•         f2.add(submit);
•
•         save = new JButton("SAVE & NEXT");
•         save.setBounds(1300,700,120,40);
•         save.setBackground(Color.GREEN);
•         save.setForeground(Color.BLACK);
•         save.addActionListener(this);
•         f2.add(save);
•
•         question[0][0] = "Which method can be used to return a string
in upper case letters?";
•         question[0][1] = "touppercase()";
•         question[0][2] = "toUpperCase()";
•         question[0][3] = "tuc()";
•         question[0][4] = "uppercase()";
•
•         question[1][0] = "How do you insert SINGLE LINE COMMENTS in
Java code?";
•         question[1][1] = "/*";
•         question[1][2] = "#";
•         question[1][3] = "//";
•         question[1][4] = "<--";
•
•         question[2][0] = "Which data type is used to create a variable
that should store text?";
•         question[2][1] = "txt";
•         question[2][2] = "string";
•         question[2][3] = "int";

```

```

        question[2][4] = "mystring";

        question[3][0] = "How do you create a variable with the numeric
value 5?";
        question[3][1] = "int a = 5;";
        question[3][2] = "float a = 5;";
        question[3][3] = "int a = 5;";
        question[3][4] = "num a = 5;";

        question[4][0] = "How do you create a variable with the
floating number 2.8?";
        question[4][1] = "int x = 2.8;";
        question[4][2] = "float x = 2.8f;";
        question[4][3] = "x = 2.8;";
        question[4][4] = "num x = 2.8";

        answer[0] = "toUpperCase()";
        answer[1] = "//";
        answer[2] = "string";
        answer[3] = "int a = 5;";
        answer[4] = "float x = 2.8f;";

        score = new JLabel();
        score.setBounds(100,670,800,60);
        score.setFont(new Font("Viner Hand ITC" , Font.PLAIN , 50));
        f2.add(score);

        start(q);
    }

    void start(int count)
    {
        score.setText("");
        QNo.setText(""+(count+1)+".");
        Question.setText(question[count][0]);
        op1.setText(question[count][1]);
        op2.setText(question[count][2]);
        op3.setText(question[count][3]);
        op4.setText(question[count][4]);

        option.clearSelection();

        op1.setEnabled(true);
        op2.setEnabled(true);
        op3.setEnabled(true);
    }
}

```

```

•         op4.setEnabled(true);
•
•         if(solved == 4)
•         {
•             save.setEnabled(false);
•             submit.setEnabled(true);
•         }
•
•     }
•     public void actionPerformed(ActionEvent a)
•     {
•         if(a.getSource() == save)
•         {
•             q++;
•             start(q);
•             score.setText("");
•         }
•         if(a.getSource() == one)
•         {
•             q=0;
•             start(q);
•         }
•         if(a.getSource() == two)
•         {
•             q=1;
•             start(q);
•         }
•         if(a.getSource() == three)
•         {
•             q=2;
•             start(q);
•         }
•         if(a.getSource() == four)
•         {
•             q=3;
•             start(q);
•         }
•         if(a.getSource() == five)
•         {
•             q=4;
•             start(q);
•         }
•
•         if(op1.isSelected())
•         {
•             ans[q] = op1.getText();
•             op2.setEnabled(false);
•             op3.setEnabled(false);

```

```

•         op4.setEnabled(false);
•     }
•     if(op2.isSelected())
•     {
•         ans[q] = op2.getText();
•         op1.setEnabled(false);
•         op3.setEnabled(false);
•         op4.setEnabled(false);
•     }
•     if(op3.isSelected())
•     {
•         ans[q] = op3.getText();
•         op1.setEnabled(false);
•         op2.setEnabled(false);
•         op4.setEnabled(false);
•     }
•     if(op4.isSelected())
•     {
•         ans[q] = op4.getText();
•         op1.setEnabled(false);
•         op2.setEnabled(false);
•         op3.setEnabled(false);
•     }
•
•     if(answer[q] == ans[q])
•     {
•         score.setText("CORRECT ANSWER ");
•         score.setForeground(Color.GREEN);
•         solved++;
•         if(q == 0)
•         {
•             one.setBackground(Color.GREEN);
•             one.setEnabled(false);
•         }
•         if(q == 1)
•         {
•             two.setBackground(Color.GREEN);
•             two.setEnabled(false);
•         }
•         if(q == 2)
•         {
•             three.setBackground(Color.GREEN);
•             three.setEnabled(false);
•         }
•         if(q == 3)
•         {
•             four.setBackground(Color.GREEN);
•             four.setEnabled(false);

```



```

    }
    if(q == 4)
    {
        five.setBackground(Color.GREEN);
        five.setEnabled(false);
    }
}
if(answer[q] != ans[q] && ans[q] != null)
{
    score.setText("Wrong Answer");
    score.setForeground(Color.RED);
    solved++;
    if(q == 0)
    {
        one.setBackground(Color.RED);
        one.setEnabled(false);
    }
    if(q == 1)
    {
        two.setBackground(Color.RED);
        two.setEnabled(false);
    }
    if(q == 2)
    {
        three.setBackground(Color.RED);
        three.setEnabled(false);
    }
    if(q == 3)
    {
        four.setBackground(Color.RED);
        four.setEnabled(false);
    }
    if(q == 4)
    {
        five.setBackground(Color.RED);
        five.setEnabled(false);
    }
}
if(a.getSource() == submit)
{
    f2.setVisible(false);
}

}

public static void main (String [] z)
{
    new quiz();
}

```

```

•     }
• }

```

- **rule.java**

```

• import javax.swing.*;
• import java.awt.*;
• import java.awt.event.*;
•
• public class rule implements ActionListener
• {
•     JLabel atb;
•     JCheckBox tick;
•     String name;
•     JButton start;
•     JFrame f3;
•     rule(String name)
•     {
•         this.name = name;
•         f3 = new JFrame();
•         f3.setSize(1000,800);
•         f3.setLayout(null);
•         f3.setBackground(Color.WHITE);
•         f3.setLocationRelativeTo(null);
•         f3.setVisible(true);
•
•         JLabel p = new JLabel("WELCOME "+name.toUpperCase()+" DJSCE
ADVANCED QUIZ");
•         p.setBounds(250,50,800,40);
•         p.setFont(new Font ("Viner Hand ITC" , Font.PLAIN , 20));
•         p.setForeground(Color.BLUE);
•         f3.add(p);
•
•         JLabel rule = new JLabel();
•         rule.setBounds(40,200,800,300);
•         rule.setFont(new Font ("Tahoma" , Font .PLAIN , 18));
•         rule.setText(
•             "<html>"+
•             "1.THERE ARE 4 OPTION FOR EACH QUESTION OUT OF WHICH
ONLY IS CORRECT"+"<br><br>"+
•             "2.ONCE THE OPTION IS SELECTED YOU CANNOT CHANGE IT SO
SELECT OPTION WISELY"+"<br><br>"+
•             "3.AFTER SELECTING THE OPTION YOU WILL BE ABLE TO KNOW
WHETHER THE ANSWER YOU SELECTED WAS RIGHT OR WRONG"+"<br><br>"+
•             "4.ALSO THE CORRECT ANSWER WILL BE DISPLAY ON THE
SCREEN"+"<br><br>"+
•             "5.ANY KIND OF CHEATING OR MALPRACTICE IS NOT ALLOWED"+
•             "</html>"

```

```

•         );
•         f3.add(rule);
•
•         tick = new JCheckBox();
•         tick.setBounds(40,550,20,20);
•         tick.addActionListener(this);
•         f3.add(tick);
•
•
•         JLabel read = new JLabel("I have all the instruction carefully
and I am ready to give the quiz");
•         read.setBounds(65,550,450,20);
•         read.setFont(new Font("Calibri" , Font.PLAIN , 15));
•         f3.add(read);
•
•         atb = new JLabel();
•         atb.setBounds(400,600,300,40);
•         atb.setFont(new Font("Viner Hand ITC" , Font.PLAIN , 20));
•         atb.setForeground(Color.BLUE);
•         f3.add(atb);
•
•         start = new JButton("Start Quiz");
•         start.setBounds(800,650,150,40);
•         start.setEnabled(false);
•         start.setBackground(Color.BLUE);
•         start.setForeground(Color.WHITE);
•         start.setFont(new Font("Calibri" , Font.PLAIN , 18));
•         start.addActionListener(this);
•         f3.add(start);
•
•     }
•
•     public void actionPerformed(ActionEvent e)
•     {
•         if(tick.isSelected())
•         {
•             atb.setText("ALL THE BEST");
•             start.setEnabled(true);
•         }
•         if(e.getSource() == start)
•         {
•             f3.setVisible(false);
•             new quiz();
•         }
•     }
•
•     public static void main(String [] z)
•     {

```

```

•         new rule("Atharva Aditya");
•     }
• }

```

- **tempCodeRunnerFile.java**

```

• import javax.swing.*;
• import java.awt.*;
• import java.awt.event.*;
•
• public class tempCodeRunnerFile
• {
•     String name;
•     tempCodeRunnerFile(String name)
•     {
•         this.name = name;
•         JFrame f3 = new JFrame();
•         f3.setSize(1000,800);
•         f3.setLayout(null);
•         f3.setBackground(Color.WHITE);
•         f3.setLocationRelativeTo(null);
•         f3.setVisible(true);
•
•         JLabel p = new JLabel("WELCOME "+name.toUpperCase()+" DJSCE
ADVANCED QUIZ");
•         p.setBounds(250,50,450,40);
•         p.setFont(new Font ("Viner Hand ITC" , Font.PLAIN , 20));
•         p.setForeground(Color.BLUE);
•         f3.add(p);
•
•         JLabel rule = new JLabel();
•         rule.setBounds(40,100,400,100);
•         rule.setFont(new Font ("Tahoma" , Font .PLAIN , 18));
•         rule.setText(
•             "<html>"+
•             "1.THERE ARE 4 OPTION FOR EACH QUESTION OUT OF WHICH
ONLY IS CORRECT">+<br><br>"+
•             "2.ONCE THE OPTION IS SELECTED YOU CANNOT CHANGE IT SO
SELECT OPTION WISELY">+<br><br>"+
•             "3.AFTER SELECTING THE OPTION YOU WILL BE ABLE TO KNOW
WHETHER THE ANSWER YOU SELECTED WAS RIGHT OR WRONG">+<br><br>"+
•             "4.ALSO THE CORRECT ANSWER WILL BE DISPLAY ON THE
SCREEN">+<br><br>"+
•             "5.ANY KIND OF CHEATING OR MALPRACTICE IS NOT ALLOWED">+
•             "</html>"
•         );
•     }
• }

```

```

•      f3.add(rule);
•
•      // JCheckBox box = new JCheckBox();
•      // box.setBounds(40,250,20,20);
•      // f3.add(box);
•
•  }
•  public static void main(String [] z)
•  {
•      new tempCodeRunnerFile("Atharva Aditya");
•  }
•  }

```

### Output:





2. How do you insert SINGLE LINE COMMENTS in Java code?

- ☒ /\*
- ☐ #
- ☐ //
- ☐ <--

*Wrong Answer*

SAVE & NEXT