

Design XO GUI

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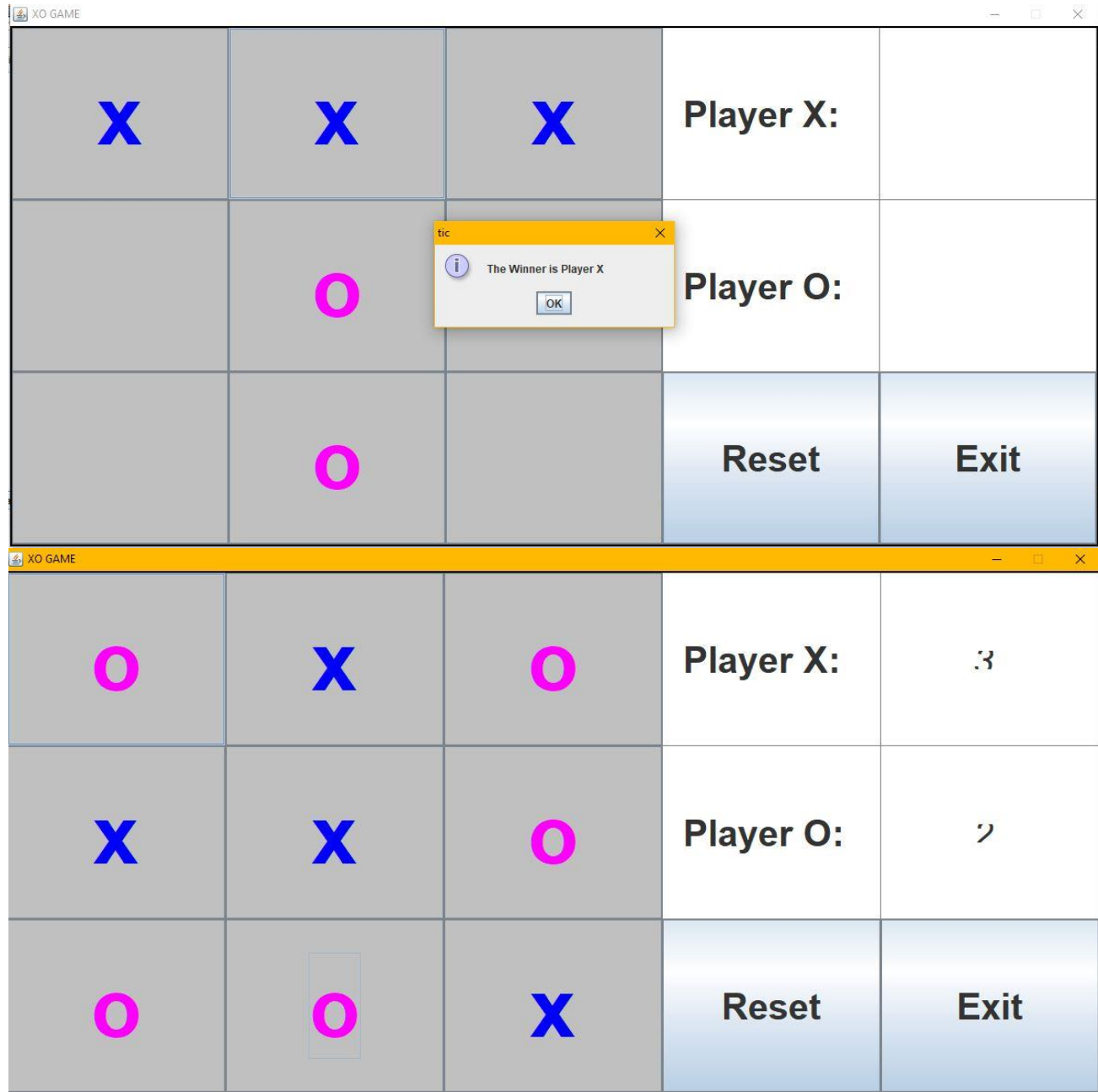
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SP21 - Advanced Programming (Spring
2021 - CS224 & CSC 224 | Practical)

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RUN



XO GAME

O	X	O	Player X:	3
X	X		Player O:	2
O	O	X	Reset	Exit

Exit Message

Are you sure to Exit from Game?

Yes No

XO GAME

X	O	O	Player X:	
	X	O	Player O:	
X		X	Reset	Exit

tic

The Winner is Player X.

OK

XO GAME

X	O	X	Player X:	3
O	O	O	Player O:	()
	X	X	Reset	Exit



CODE

```

package javaapplication92;

public class JavaApplication92 {

    public static void main(String[] args) {
        XO xo=new XO();
    }

}

package javaapplication92;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;

public class XO extends JFrame {
    actions a=new actions();
    JPanel
    pba,p1,p2,p3,p4,p5,p6,p7,p8,p9,p10,p11,p12,p13,
    p14,p15;
    JLabel
    l1,l2,l3,l4,l5,l6,l7,l8,l9,l10,l11,l12,l13,l14,l15,l16,l17
    ,l18,l19;
    JButton b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11;
    private int countx=0;
    private int counto=0;
    private String player_start="x";

    public XO(){

        pba=new JPanel();
        p1=new JPanel();
        p2=new JPanel();
        p3=new JPanel();
        p4=new JPanel();
        p5=new JPanel();
        p6=new JPanel();
        p7=new JPanel();
        p8=new JPanel();
        p9=new JPanel();

```

```

p10=new JPanel();
p11=new JPanel();
p12=new JPanel();
p13=new JPanel();
p14=new JPanel();
p15=new JPanel();

l1=new JLabel();
l2=new JLabel();
l3=new JLabel();
l4=new JLabel(" Player X: ");
l5=new JLabel();
l6=new JLabel();
l7=new JLabel();
l8=new JLabel();
l9=new JLabel(" Player O: ");
l10=new JLabel();
l11=new JLabel();
l12=new JLabel();
l13=new JLabel();
l14=new JLabel();
l15=new JLabel();
b1=new JButton();
b2=new JButton();
b3=new JButton();
b4=new JButton();
b5=new JButton();
b6=new JButton();
b7=new JButton();
b8=new JButton();
b9=new JButton();
b10=new JButton("Reset");
b11=new JButton("Exit");

display();
}
private void score(){
    l5.setText(Integer.toString( countx ));
    l10.setText(Integer.toString( counto ));
}
private void choose_player(){
    if(player_start=="x"){
        player_start="o";
    }
    else{
        player_start="x";
    }
}
private void who_win(){

```

```
if(b1.getText()=="x"&&b2.getText()=="x"&&b3.g  
etText()=="x"){  
    JOptionPane.showMessageDialog(this,  
"The Winner is Player X",  
"tic",JOptionPane.INFORMATION_MESSAGE);  
    countx++;  
    score();  
  
}
```

```
if(b1.getText()=="o"&&b2.getText()=="o"&&b3.  
getText()=="o"){  
    JOptionPane.showMessageDialog(this,  
"The Winner is Player O",  
"tic",JOptionPane.INFORMATION_MESSAGE);  
    counto++;  
    score();  
  
}
```

```
if(b4.getText()=="x"&&b5.getText()=="x"&&b6.g  
etText()=="x"){  
    JOptionPane.showMessageDialog(this,  
"The Winner is Player X",  
"tic",JOptionPane.INFORMATION_MESSAGE);  
    countx++;  
    score();  
  
}
```

```
if(b4.getText()=="o"&&b5.getText()=="o"&&b6.  
getText()=="o"){  
    JOptionPane.showMessageDialog(this,  
"The Winner is Player O.",  
"tic",JOptionPane.INFORMATION_MESSAGE);  
    counto++;  
    score();  
  
}
```

```
if(b7.getText()=="x"&&b8.getText()=="x"&&b9.g  
etText()=="x"){
```

```

        JOptionPane.showMessageDialog(this,
"The Winner is Player X.",
"tic",JOptionPane.INFORMATION_MESSAGE);
        countx++;
        score();

```

```

    }

```

```

if(b7.getText()=="o"&&b8.getText()=="o"&&b9.
getText()=="o"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player O.",
"tic",JOptionPane.INFORMATION_MESSAGE);
        counto++;
        score();

```

```

    }

```

```

if(b1.getText()=="x"&&b4.getText()=="x"&&b7.g
etText()=="x"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player X.",
"tic",JOptionPane.INFORMATION_MESSAGE);
        countx++;
        score();

```

```

    }

```

```

if(b1.getText()=="o"&&b4.getText()=="o"&&b7.
getText()=="o"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player O.",
"tic",JOptionPane.INFORMATION_MESSAGE);
        counto++;
        score();

```

```

    }

```

```

if(b2.getText()=="x"&&b5.getText()=="x"&&b8.g
etText()=="x"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player X.",
"tic",JOptionPane.INFORMATION_MESSAGE);
        countx++;
        score();

```

```

    }

```



```

if(b2.getText()=="o"&&b5.getText()=="o"&&b8.
getText()=="o"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player O.",
"tic",JOptionPane.INFORMATION_MESSAGE);
    counto++;
    score();

}

```

```

if(b3.getText()=="x"&&b6.getText()=="x"&&b9.g
etText()=="x"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player X.",
"tic",JOptionPane.INFORMATION_MESSAGE);
    countx++;
    score();

}

```

```

if(b3.getText()=="o"&&b6.getText()=="o"&&b9.
getText()=="o"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player O.",
"tic",JOptionPane.INFORMATION_MESSAGE);
    counto++;
    score();

}

```

```

if(b1.getText()=="x"&&b5.getText()=="x"&&b9.g
etText()=="x"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player X.",
"tic",JOptionPane.INFORMATION_MESSAGE);
    countx++;
    score();

}

```

```

if(b1.getText()=="o"&&b5.getText()=="o"&&b9.
getText()=="o"){
    JOptionPane.showMessageDialog(this,
"The Winner is Player O.",
"tic",JOptionPane.INFORMATION_MESSAGE);
    counto++;
    score();
}

```

```

    }

    if(b3.getText()=="x"&&b5.getText()=="x"&&b7.g
    etText()=="x"){
        JOptionPane.showMessageDialog(this,
        "The Winner is Player X.",
        "tic",JOptionPane.INFORMATION_MESSAGE);
        countx++;
        score();

    }

    if(b3.getText()=="o"&&b5.getText()=="o"&&b7.
    getText()=="o"){
        JOptionPane.showMessageDialog(this,
        "The Winner is Player O.",
        "tic",JOptionPane.INFORMATION_MESSAGE);
        counto++;
        score();

    }
}

public void display(){
    this.setTitle("XO GAME");
    this.setSize(1200, 600);
    this.setResizable(false);
    this.setVisible(true);

this.setDefaultCloseOperation(JFrame.EXIT_O
N_CLOSE);
    pba.setBackground(Color.GRAY);

pba.setBorder(BorderFactory.createLineBorder(
Color.BLACK, 2));

    l4.setFont(new
    Font("timl",Font.BOLD,40));
    l9.setFont(new
    Font("timl",Font.BOLD,40));
    l5.setFont(new
    Font("timl",Font.ITALIC,40));
    l10.setFont(new
    Font("timl",Font.ITALIC,40));
    b10.setFont(new
    Font("timl",Font.BOLD,40));
    b11.setFont(new
    Font("timl",Font.BOLD,40));
    b1.setFont(new
    Font("timl",Font.BOLD,90));

```

```

        b2.setFont(new
Font("timl",Font.BOLD,90));
        b3.setFont(new
Font("timl",Font.BOLD,90));
        b4.setFont(new
Font("timl",Font.BOLD,90));
        b5.setFont(new
Font("timl",Font.BOLD,90));
        b6.setFont(new
Font("timl",Font.BOLD,90));
        b7.setFont(new
Font("timl",Font.BOLD,90));
        b8.setFont(new
Font("timl",Font.BOLD,90));
        b9.setFont(new
Font("timl",Font.BOLD,90));

```

```

p1.setLayout(new BorderLayout());
p1.setBackground(Color.WHITE);
p2.setLayout(new BorderLayout());
p2.setBackground(Color.WHITE);
p3.setLayout(new BorderLayout());
p3.setBackground(Color.WHITE);
p4.setLayout(new BorderLayout());
p4.setBackground(Color.WHITE);
p5.setLayout(null);
l5.setBounds(100, 85, 30, 20);
p5.setBackground(Color.WHITE);
p6.setLayout(new BorderLayout());
p6.setBackground(Color.WHITE);
p7.setLayout(new BorderLayout());
p7.setBackground(Color.WHITE);
p8.setLayout(new BorderLayout());
p8.setBackground(Color.WHITE);
p9.setLayout(new BorderLayout());
p9.setBackground(Color.WHITE);
p10.setLayout(null);
l10.setBounds(100, 85, 30, 20);
p10.setBackground(Color.WHITE);
p11.setLayout(new BorderLayout());
p11.setBackground(Color.WHITE);
p12.setLayout(new BorderLayout());
p12.setBackground(Color.WHITE);
p13.setLayout(new BorderLayout());
p13.setBackground(Color.WHITE);
p14.setLayout(new BorderLayout());
p14.setBackground(Color.WHITE);
p15.setLayout(new BorderLayout());
p15.setBackground(Color.WHITE);
b1.setBackground(Color.LIGHT_GRAY);

```

```
b2.setBackground(Color.LIGHT_GRAY);
b3.setBackground(Color.LIGHT_GRAY);
b4.setBackground(Color.LIGHT_GRAY);
b5.setBackground(Color.LIGHT_GRAY);
b6.setBackground(Color.LIGHT_GRAY);
b7.setBackground(Color.LIGHT_GRAY);
b8.setBackground(Color.LIGHT_GRAY);
b9.setBackground(Color.LIGHT_GRAY);
pba.setLayout(new GridLayout(3,5,1,1));
```

```
p1.add(l1);
p1.add(b1);
pba.add(p1);
p2.add(l2);
p2.add(b2);
pba.add(p2);
p3.add(l3);
p3.add(b3);
pba.add(p3);
p4.add(l4,BorderLayout.CENTER);
pba.add(p4);
p5.add(l5,BorderLayout.CENTER);
pba.add(p5);
p6.add(l6);
p6.add(b4);
pba.add(p6);
p7.add(l7);
p7.add(b5);
pba.add(p7);
p8.add(l8);
p8.add(b6);
pba.add(p8);
p9.add(l9,BorderLayout.CENTER);
pba.add(p9);
p10.add(l10,BorderLayout.CENTER);
pba.add(p10);
p11.add(l11);
p11.add(b7);
pba.add(p11);
p12.add(l12);
p12.add(b8);
pba.add(p12);
p13.add(l13);
p13.add(b9);
pba.add(p13);
p14.add(l14);
p14.add(b10);
pba.add(p14);
p15.add(l15);
p15.add(b11);
```

```

        pba.add(p15);
        this.add(pba);
        b10.addActionListener(a);
        b11.addActionListener(a);
        b1.addActionListener(a);
        b2.addActionListener(a);
        b3.addActionListener(a);
        b4.addActionListener(a);
        b5.addActionListener(a);
        b6.addActionListener(a);
        b7.addActionListener(a);
        b8.addActionListener(a);
        b9.addActionListener(a);
    }
    private class actions implements
    ActionListener{

        @Override

        public void actionPerformed(ActionEvent
e) {
            JFrame fram;

            if(e.getSource()==b11){
                fram=new JFrame();
                if(
JOptionPane.showConfirmDialog(fram,"Are you
sure to Exit from Game?","Exit Message",
JOptionPane.YES_NO_OPTION)==
JOptionPane.YES_NO_OPTION){
                    System.exit(0);
                }
            }
            if(e.getSource()==b1){
                b1.setText(player_start);
                if(player_start=="x"){
                    b1.setForeground(Color.blue);
                }
            }
            else{
                b1.setForeground(Color.magenta);
            }
            choose_player();
            who_win();
        }
        if(e.getSource()==b2){
            b2.setText(player_start);
            if(player_start=="x"){
                b2.setForeground(Color.BLUE);
            }
        }
        else{

```

```

        b2.setForeground(Color.magenta);
    }
    choose_player();
    who_win();
}
if(e.getSource()==b3){
    b3.setText(player_start);
    if(player_start=="x"){
        b3.setForeground(Color.BLUE);
    }
}
else{
    b3.setForeground(Color.magenta);
}
    choose_player();
    who_win();
}
if(e.getSource()==b4){
    b4.setText(player_start);
    if(player_start=="x"){
        b4.setForeground(Color.BLUE);
    }
}
else{
    b4.setForeground(Color.magenta);
}
    choose_player();
    who_win();
}
if(e.getSource()==b5){
    b5.setText(player_start);
    if(player_start=="x"){
        b5.setForeground(Color.BLUE);
    }
}
else{
    b5.setForeground(Color.magenta);
}
    choose_player();
    who_win();
}
if(e.getSource()==b6){
    b6.setText(player_start);
    if(player_start=="x"){
        b6.setForeground(Color.BLUE);
    }
}
else{
    b6.setForeground(Color.magenta);
}
    choose_player();
    who_win();
}
if(e.getSource()==b7){

```

```

        b7.setText(player_start);
        if(player_start=="x"){
            b7.setForeground(Color.BLUE);
        }
        else{
            b7.setForeground(Color.magenta);
        }

        choose_player();
        who_win();
    }
    if(e.getSource()==b8){
        b8.setText(player_start);
        if(player_start=="x"){
            b8.setForeground(Color.BLUE);
        }
        else{
            b8.setForeground(Color.magenta);
        }

        choose_player();
        who_win();
    }
    if(e.getSource()==b9){
        b9.setText(player_start);
        if(player_start=="x"){
            b9.setForeground(Color.BLUE);
        }
        else{
            b9.setForeground(Color.magenta);
        }

        choose_player();
        who_win();
    }
    if(e.getSource()==b10){
        b1.setText(null);
        b2.setText(null);
        b3.setText(null);
        b4.setText(null);
        b5.setText(null);
        b6.setText(null);
        b7.setText(null);
        b8.setText(null);
        b9.setText(null);
    }
}
}
}

```

}

