Tic-Tac-Toe

import java.awt.BorderLayout;

import java.awt.FlowLayout;

import java.awt.GridLayout;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.JTextField;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.util.Arrays;

import javax.swing.JOptionPane;

class CreatBoard {

JFrame frame = new JFrame("");

JPanel panel = new JPanel();

JPanel panel2 = new JPanel();

JButton button1 = new JButton(" ");

JButton button2 = new JButton(" ");

JButton button3 = new JButton(" ");

JButton button4 = new JButton(" ");

JButton button5 = new JButton(" ");

JButton button6 = new JButton(" ");

JButton button7 = new JButton(" ");

JButton button8 = new JButton(" ");

JButton button9 = new JButton(" ");

JButton playagain = new JButton("Play Again");

JButton exit = new JButton("Exit");

JTextField text = new JTextField("", 100);

static String player\_1\_Naeme;

static String player\_2\_Naeme;

public CreatBoard(String player\_1\_Naeme, String player\_2\_Naeme) {

this.player\_1\_Naeme = player\_1\_Naeme;

this.player\_2\_Naeme = player\_2\_Naeme;

frame.setSize(200, 165);

frame.setTitle("TIC-TAC-TOE");

frame.setLocation(240, 200);

frame.setResizable(false);

frame.setLayout(new BorderLayout());

panel.setLayout(new GridLayout(3, 3));

panel2.setLayout(new FlowLayout());

panel.add(button1);

panel.add(button2);

panel.add(button3);

panel.add(button4);

panel.add(button5);

panel.add(button6);

panel.add(button7);

panel.add(button8);

panel.add(button9);

panel2.add(playagain);

panel2.add(exit);

frame.add(panel, BorderLayout.NORTH);

frame.add(text, BorderLayout.SOUTH);

frame.add(panel2, BorderLayout.CENTER);

button1.addActionListener(new ButtonAction(this));

button2.addActionListener(new ButtonAction(this));

button3.addActionListener(new ButtonAction(this));

button4.addActionListener(new ButtonAction(this));

button5.addActionListener(new ButtonAction(this));

button6.addActionListener(new ButtonAction(this));

button7.addActionListener(new ButtonAction(this));

button8.addActionListener(new ButtonAction(this));

button9.addActionListener(new ButtonAction(this));

playagain.addActionListener(new ButtonAction(this));

exit.addActionListener(new ButtonAction(this));

text.setText(player\_1\_Naeme + "'s Turn.");

frame.show();

}

}

class ButtonAction implements ActionListener {

CreatBoard creatboard;

String s;

Process playobject = new Process();

public ButtonAction(CreatBoard object) {

this.creatboard = object;

}

public void actionPerformed(ActionEvent event) {

s = event.getActionCommand();

if (event.getSource() == creatboard.playagain) {

creatboard.frame.dispose();

Maintain.reset();

TicTacToe mainobject = new TicTacToe();

mainobject.main(null);

}

if (event.getSource() == creatboard.exit) {

creatboard.frame.dispose();

System.exit(0);

}

else {

if (Maintain.counter <= 8) {

if (s == " " || s == " ") {

if (event.getSource() == creatboard.button1)

playobject.play(0, creatboard.button1, creatboard.text);

else if (event.getSource() == creatboard.button2)

playobject.play(1, creatboard.button2, creatboard.text);

else if (event.getSource() == creatboard.button3)

playobject.play(2, creatboard.button3, creatboard.text);

else if (event.getSource() == creatboard.button4)

playobject.play(3, creatboard.button4, creatboard.text);

else if (event.getSource() == creatboard.button5)

playobject.play(4, creatboard.button5, creatboard.text);

else if (event.getSource() == creatboard.button6)

playobject.play(5, creatboard.button6, creatboard.text);

else if (event.getSource() == creatboard.button7)

playobject.play(6, creatboard.button7, creatboard.text);

else if (event.getSource() == creatboard.button8)

playobject.play(7, creatboard.button8, creatboard.text);

else if (event.getSource() == creatboard.button9)

playobject.play(8, creatboard.button9, creatboard.text);

}

else {

creatboard.text.setText("Already Selected");

}

}

else

creatboard.text.setText("Game is over");

}

}

}

public class Process {

Maintain maintain = new Maintain();

public static int player = 1;

public void play(int number, JButton button, JTextField text) {

if (player == 1) {

maintain.saveInput(number, 'X');

button.setText("X");

text.setText(CreatBoard.player\_2\_Naeme + "'s Turn.");

}

else {

Maintain.saveInput(number, 'O');

button.setText("O");

text.setText(CreatBoard.player\_1\_Naeme + "'s Turn");

}

if (maintain.result()) {

if (player == 1)

text.setText(CreatBoard.player\_1\_Naeme + " Is Win");

else

text.setText(CreatBoard.player\_2\_Naeme + " IS Win");

Maintain.counter = 10;

}

if (Maintain.counter == 9) {

text.setText("Draw");

}

if (player == 1)

player = 2;

else

player = 1;

}

}

class Maintain {

private static char y[] = new char[9];

public static int counter = 0;

public static void saveInput(int index, char c) {

y[index] = c;

counter++;

}

public boolean getInformation(int u) {

if (y[u] == 'X' || y[u] == 'O')

return true;

else

return false;

}

public static void reset() {

Arrays.fill(y, ' ');

counter = 0;

Process.player = 1;

}

public boolean result() {

if ((y[0] == 'X' && y[1] == 'X' && y[2] == 'X')

|| (y[3] == 'X' && y[4] == 'X' && y[5] == 'X')

|| (y[6] == 'X' && y[7] == 'X' && y[8] == 'X')

|| (y[0] == 'X' && y[3] == 'X' && y[6] == 'X')

|| (y[1] == 'X' && y[4] == 'X' && y[7] == 'X')

|| (y[2] == 'X' && y[5] == 'X' && y[8] == 'X')

|| (y[0] == 'X' && y[4] == 'X' && y[8] == 'X')

|| (y[2] == 'X' && y[6] == 'X' && y[4] == 'X'))

return true;

if ((y[0] == 'O' && y[1] == 'O' && y[2] == 'O')

|| (y[3] == 'O' && y[4] == 'O' && y[5] == 'O')

|| (y[6] == 'O' && y[7] == 'O' && y[8] == 'O')

|| (y[0] == 'O' && y[3] == 'O' && y[6] == 'O')

|| (y[1] == 'O' && y[4] == 'O' && y[7] == 'O')

|| (y[2] == 'O' && y[5] == 'O' && y[8] == 'O')

|| (y[0] == 'O' && y[4] == 'O' && y[8] == 'O')

|| (y[2] == 'O' && y[6] == 'O' && y[4] == 'O'))

return true;

return false;

}

}

public class TicTacToe {

public static void main(String[] args) {

String player1;

String player2;

player1 = JOptionPane.showInputDialog(null, "Enter Player-1 Name ",

"Player One");

player2 = JOptionPane.showInputDialog(null, "Enter Player-2 Name : ",

"Player Two");

if(player1!=null&&player2!=null){

CreatBoard start = new CreatBoard(player1, player2);

}

}

}