For: Dominic “Seth” Jones-Jackson

Assignment: Assignment Name

GitHub URL: <https://github.com/sethveeper/Spring21_ProjectStarbucks>

Student: Please answer the questions, then use the Insert, Screenshot option in Word to snip an appropriate sample of your executing program’s output.

Copy the code from your .java file(s) into the code section below. Your code should match the code submitted in GitHub.

Be sure to review your graded assignment for instructor comments!

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| **Analysis** |
| Write a program that displays a tic-tac-toe board. A cell may be X, O, or empty. What to display at each cell is randomly decided. The X and O are images in the files **x.gif** and **o.gif**. |
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| **Design** |
| I took a liberty and decided to make the game board useable rather than random.  I designed a quick and dirty button, copied it nine times, named them appropriately. A singular “getMark” event determines both what mark to place, and how to display the current turn. Then, each button has a separate event handler (ugh) that calls “getMark” for X or O, and also disables that button. |
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| **Screenshot(s)** |
| X ended up winning this game. |
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| **Code** |
| /\*  \* To change this license header, choose License Headers in Project Properties.  \* To change this template file, choose Tools | Templates  \* and open the template in the editor.  \*/  package tictactoe;  /\*\*  \* From Board.java  \* @author Seth Veeper  \*/  public class Board extends javax.swing.JFrame {  public boolean turn = false;  /\*\*  \* Creates new form Board  \*/  public Board() {  initComponents();  }  public void OnClick()  {  if(turn)  {  lblTurn.setText("It is O's turn.");  }  else  {  lblTurn.setText("It is X's turn.");  }  }    /\*\*  \* This method is called from within the constructor to initialize the form.  \* WARNING: Do NOT modify this code. The content of this method is always  \* regenerated by the Form Editor.  \*/  @SuppressWarnings("unchecked")  // <editor-fold defaultstate="collapsed" desc="Generated Code">  private void initComponents() {  btnNW = new javax.swing.JButton();  btnN = new javax.swing.JButton();  btnNE = new javax.swing.JButton();  btnE = new javax.swing.JButton();  btnW = new javax.swing.JButton();  btnC = new javax.swing.JButton();  btnSE = new javax.swing.JButton();  btnSW = new javax.swing.JButton();  btnS = new javax.swing.JButton();  lblTurn = new javax.swing.JLabel();  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);  btnNW.setText("?");  btnNW.setToolTipText("");  btnNW.setMaximumSize(new java.awt.Dimension(100, 100));  btnNW.setMinimumSize(new java.awt.Dimension(40, 40));  btnNW.setPreferredSize(new java.awt.Dimension(42, 42));  btnNW.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnNWActionPerformed(evt);  }  });  btnN.setText("?");  btnN.setToolTipText("");  btnN.setMaximumSize(new java.awt.Dimension(100, 100));  btnN.setMinimumSize(new java.awt.Dimension(40, 40));  btnN.setPreferredSize(new java.awt.Dimension(42, 42));  btnN.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnNActionPerformed(evt);  }  });  btnNE.setText("?");  btnNE.setToolTipText("");  btnNE.setMaximumSize(new java.awt.Dimension(100, 100));  btnNE.setMinimumSize(new java.awt.Dimension(40, 40));  btnNE.setPreferredSize(new java.awt.Dimension(42, 42));  btnNE.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnNEActionPerformed(evt);  }  });  btnE.setText("?");  btnE.setToolTipText("");  btnE.setMaximumSize(new java.awt.Dimension(100, 100));  btnE.setMinimumSize(new java.awt.Dimension(40, 40));  btnE.setPreferredSize(new java.awt.Dimension(42, 42));  btnE.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnEActionPerformed(evt);  }  });  btnW.setText("?");  btnW.setToolTipText("");  btnW.setMaximumSize(new java.awt.Dimension(100, 100));  btnW.setMinimumSize(new java.awt.Dimension(40, 40));  btnW.setPreferredSize(new java.awt.Dimension(42, 42));  btnW.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnWActionPerformed(evt);  }  });  btnC.setText("?");  btnC.setToolTipText("");  btnC.setMaximumSize(new java.awt.Dimension(100, 100));  btnC.setMinimumSize(new java.awt.Dimension(40, 40));  btnC.setPreferredSize(new java.awt.Dimension(42, 42));  btnC.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnCActionPerformed(evt);  }  });  btnSE.setText("?");  btnSE.setToolTipText("");  btnSE.setMaximumSize(new java.awt.Dimension(100, 100));  btnSE.setMinimumSize(new java.awt.Dimension(40, 40));  btnSE.setPreferredSize(new java.awt.Dimension(42, 42));  btnSE.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnSEActionPerformed(evt);  }  });  btnSW.setText("?");  btnSW.setToolTipText("");  btnSW.setMaximumSize(new java.awt.Dimension(100, 100));  btnSW.setMinimumSize(new java.awt.Dimension(40, 40));  btnSW.setPreferredSize(new java.awt.Dimension(42, 42));  btnSW.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnSWActionPerformed(evt);  }  });  btnS.setText("?");  btnS.setToolTipText("");  btnS.setMaximumSize(new java.awt.Dimension(100, 100));  btnS.setMinimumSize(new java.awt.Dimension(40, 40));  btnS.setPreferredSize(new java.awt.Dimension(42, 42));  btnS.addActionListener(new java.awt.event.ActionListener() {  public void actionPerformed(java.awt.event.ActionEvent evt) {  btnSActionPerformed(evt);  }  });  lblTurn.setText("It is X's turn.");  javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());  getContentPane().setLayout(layout);  layout.setHorizontalGroup(  layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  .addGroup(layout.createSequentialGroup()  .addContainerGap()  .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  .addGroup(layout.createSequentialGroup()  .addComponent(btnNW, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addComponent(btnN, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addComponent(btnNE, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE))  .addGroup(layout.createSequentialGroup()  .addComponent(btnW, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addComponent(btnC, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addComponent(btnE, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE))  .addGroup(layout.createSequentialGroup()  .addComponent(btnSW, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addComponent(btnS, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addComponent(btnSE, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE))  .addComponent(lblTurn))  .addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))  );  layout.setVerticalGroup(  layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  .addGroup(layout.createSequentialGroup()  .addContainerGap()  .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)  .addComponent(btnNW, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addComponent(btnN, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addComponent(btnNE, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE))  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)  .addComponent(btnW, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addComponent(btnC, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addComponent(btnE, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE))  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)  .addComponent(btnSW, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addComponent(btnS, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)  .addComponent(btnSE, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE))  .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)  .addComponent(lblTurn)  .addContainerGap(42, Short.MAX\_VALUE))  );  pack();  }// </editor-fold>  public String getMark()  {  String output = "";  if(turn)  {  output = "O";  lblTurn.setText("It is X's turn.");  }  else  {  output = "X";  lblTurn.setText("It is O's turn.");  }  turn = !turn;    return output;  }    private void btnNWActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnNW.setText(getMark());  btnNW.setEnabled(false);  }  private void btnNActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnN.setText(getMark());  btnN.setEnabled(false);  }  private void btnNEActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnNE.setText(getMark());  btnNE.setEnabled(false);  }  private void btnWActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnW.setText(getMark());  btnW.setEnabled(false);  }  private void btnCActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnC.setText(getMark());  btnC.setEnabled(false);  }  private void btnEActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnE.setText(getMark());  btnE.setEnabled(false);  }  private void btnSWActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnSW.setText(getMark());  btnSW.setEnabled(false);  }  private void btnSActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnS.setText(getMark());  btnS.setEnabled(false);  }  private void btnSEActionPerformed(java.awt.event.ActionEvent evt) {  // TODO add your handling code here:  btnSE.setText(getMark());  btnSE.setEnabled(false);  }  /\*\*  \* @param args the command line arguments  \*/  // Variables declaration - do not modify  private javax.swing.JButton btnC;  private javax.swing.JButton btnE;  private javax.swing.JButton btnN;  private javax.swing.JButton btnNE;  private javax.swing.JButton btnNW;  private javax.swing.JButton btnS;  private javax.swing.JButton btnSE;  private javax.swing.JButton btnSW;  private javax.swing.JButton btnW;  private javax.swing.JLabel lblTurn;  // End of variables declaration  } |
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