package guiLayoutManagerPackage;  
  
// imports features that let me use certain code  
import javax.swing.\*;  
import java.awt.\*;  
import java.awt.event.\*;  
  
public class guiLayoutManager extends JFrame implements ActionListener {  
  
 // creating private variables  
 private GridBagLayout gbLayout;  
 private GridBagConstraints btnConstraints;  
 private GridBagConstraints lblConstraints;  
 private GridBagConstraints pnlConstraints;  
 private Container container;  
 private JButton btnDog, btnCat, btnMouse, btnHorse;  
  
 public guiLayoutManager() {  
  
 //Set window name  
 super("GUI Layout Manager");  
  
 //Initialize container and set it's layout  
 container = getContentPane();  
 gbLayout = new GridBagLayout();  
 container.setLayout( gbLayout );  
  
 //Set the constraints for the buttons  
 btnConstraints = new GridBagConstraints();  
 btnConstraints.fill = GridBagConstraints.*HORIZONTAL*;  
 btnConstraints.insets = new Insets(5,5,5,5);  
 btnConstraints.weightx = 1;  
  
 //Set the constraints for the label  
 lblConstraints = new GridBagConstraints();  
 lblConstraints.anchor = GridBagConstraints.*CENTER*;  
  
 //Set the constraints for the panel  
 pnlConstraints = new GridBagConstraints();  
 pnlConstraints.gridy = 0;  
 pnlConstraints.gridwidth = GridBagConstraints.*REMAINDER*;  
  
 //Initialize all contents of the window  
 JPanel panel = new JPanel();  
 JLabel label = new JLabel("This Program Demonstrates the GUI Layout Manager");  
 ImageIcon btnIcon = new ImageIcon("C:\\gridBagProject\\images\\soccerBall.jpg");  
 btnIcon = new ImageIcon(btnIcon.getImage().getScaledInstance(140, 80, java.awt.Image.*SCALE\_SMOOTH*));  
 btnDog = new JButton("Dog", btnIcon);  
 btnCat = new JButton("Cat");  
 btnMouse = new JButton("Mouse");  
 btnHorse = new JButton("Horse");  
  
 //Add action listener to each button  
 btnDog.addActionListener(this);  
 btnCat.addActionListener(this);  
 btnMouse.addActionListener(this);  
 btnHorse.addActionListener(this);  
  
 //Add all the components to the container  
 panel.add(label, lblConstraints);  
 container.add(panel, pnlConstraints);  
 container.add(btnDog, btnConstraints);  
 container.add(btnCat, btnConstraints);  
 container.add(btnMouse, btnConstraints);  
 container.add(btnHorse, btnConstraints);  
  
 //Make the container visible, set it's size and show it  
 container.setVisible(true);  
 setSize(300,300);  
 show();  
  
 } // end of public guiLayoutManager  
  
  
 //Checks which button was pressed, and runs code based on the pressed button  
 public void actionPerformed(ActionEvent e) {  
 if(e.getSource() == btnDog) {  
 JOptionPane.*showMessageDialog*(null, "Bark!");  
 }else if(e.getSource() == btnCat) {  
 JOptionPane.*showMessageDialog*(null, "Meow");  
 }else if(e.getSource() == btnMouse) {  
 JOptionPane.*showMessageDialog*(null, "Squeak Squeak");  
 }else if(e.getSource() == btnHorse) {  
 JOptionPane.*showMessageDialog*(null, "Neigh");  
 }  
 } // end of handler  
  
 public static void main(String [] args) {  
 new guiLayoutManager();  
 } // end of main method  
} // end of class