```java
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import CSCI.*;

public class BMIcalc extends JPanel {

    private static JComboBox measurementBox;
    private static JTextField textField;
    private static JTextField textField2;
    private static JTextField textField3;
    private static JTextField BMIfinal;

    public BMIcalc()
    {
        super(new BorderLayout());
        // layout of window
        JPanel labelPanel = new JPanel(new GridLayout(5, 2)); // 5 rows 2 columns
        add(labelPanel, BorderLayout.WEST);
        JPanel fieldPanel = new JPanel(new GridLayout(5, 2)); // 5 rows 2 columns
        add(fieldPanel, BorderLayout.CENTER);

        // select between Metric or Imperial measurements
        JLabel labelCombo = new JLabel("System:");
        String[] options = { "Metric", "Imperial" };
        measurementBox = new JComboBox(options);
        measurementBox.addActionListener(new ActionListener()
        {

            @Override
            public void actionPerformed(ActionEvent e)
            {
                //keeping this here in case I want to do something with it dependent
                upon selection, like change appearance

            } //see above
        }); //end of measurementBox ActionListener

        JLabel labelHeight = new JLabel("Height (m/in)");
        textField = new JTextField();
        JLabel labelWeight = new JLabel("Weight (kg/lb)");
        textField2 = new JTextField();
        JLabel labelAge = new JLabel("Age (yrs)");
        textField3 = new JTextField();
        JLabel finalBMIlabel = new JLabel("BMI:");
        BMIfinal = new JTextField();

        labelPanel.add(labelCombo);
        labelPanel.add(labelHeight);
        labelPanel.add(labelWeight);
        labelPanel.add(labelAge);
        labelPanel.add(finalBMIlabel);

        fieldPanel.add(measurementBox);
        fieldPanel.add(textField);
        fieldPanel.add(textField2);
        fieldPanel.add(textField3);
            fieldPanel.add(BMIfinal);
    } //end of Public BMIcalc

    public static void main(String[] args)
    {
        final BMIcalc form = new BMIcalc();

        // Calculate BMI button
        JButton submit = new JButton("Calculate my BMI");
        submit.addActionListener(new ActionListener()
        {
            @Override
```

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69              public void actionPerformed(ActionEvent e)
70              {
71                  createBMI((String) measurementBox.getSelectedItem(),
                    textField.getText());
72              } //end of actionPerformed
73          }); //end of Calculate button
74
75          // program frame
76          JFrame guiFrame = new JFrame("Simple BMI Calculator");
77          guiFrame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
78          guiFrame.setSize(300,200);
79                      guiFrame.setLocationRelativeTo(null);
80          guiFrame.getContentPane().add(form, BorderLayout.NORTH);
81          JPanel p = new JPanel();
82          p.add(submit);
83          guiFrame.getContentPane().add(p, BorderLayout.SOUTH);
84          guiFrame.pack();
85          guiFrame.setVisible(true);
86      } //end of main
87
88      private static void createBMI(String selectedItem, String text)
89      {
90          // selects between imperial and metric to calculate BMI
91          if(selectedItem.equals("Metric"))
92          {
93              System.out.println("Metric is selected");
94                  double ERROR = -1;
95                  double age = CSCIConvert.Parse(textField3.getText(), ERROR);
96                  double height = CSCIConvert.Parse(textField.getText(), ERROR);
97                  double weight = CSCIConvert.Parse(textField2.getText(), ERROR);
98                  if(age == -1 || height == -1 || weight == -1)
99                  {
100                 System.out.println("ERROR: INVALID INPUT");
101                 String output = new String("ERROR: INVALID INPUT");
102                     BMIfinal.setText(output);
103                 }//throw error if input is invalid
104                 else
105                 {
106                 double BMI = weight/(height * height);
107                 System.out.println("Thanks! Now I know that:\nYour age is " + age + "
                    years\nYour height is " + height + " meters\nYour weight is " + weight
                    + " kilograms\nTherefore, your BMI is " + BMI);
108                 String output = new String(""+BMI);
109                     BMIfinal.setText(output);
110                 }//calculate BMI in metric standard
111         } //end of metric if statement
112         else
113         {
114             System.out.println("Imperial is selected");
115                 double ERROR = -1;
116                 double age = CSCIConvert.Parse(textField3.getText(), ERROR);
117                 double height = CSCIConvert.Parse(textField.getText(), ERROR);
118                 double weight = CSCIConvert.Parse(textField2.getText(), ERROR);
119                 if(age == -1 || height == -1 || weight == -1)
120                 {
121                 System.out.println("ERROR: INVALID INPUT");
122                 String output = new String("ERROR: INVALID INPUT");
123                     BMIfinal.setText(output);
124                 }//throw error if any input is invalid (not double)
125                 else
126                 {
127                 double BMI = (weight*703)/(height * height);
128                 System.out.println("Thanks! Now I know that:\nYour age is " + age + "
                    years\nYour height is " + height + " inches\nYour weight is " + weight
                    + " pounds\nTherefore, your BMI is " + BMI);
129                 String output2 = new String(""+BMI);
130                     BMIfinal.setText(output2);
131                 }//calculate BMI in imperial standard
132         } //end of imperial if statement
```

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133         } //end of createBMI
134     } //end of BMI class
```