

Criterion C: Development

This program is written in Java

List of techniques:

1. Object-oriented paradigm
2. Inheritance
3. Conditional Statements
4. Use of DrJava Integrated Development Environment

Program Structure:

Within the program, the user inputs their initial value. The value is then read through the Scanner method in the Converter class. The Scanner then stores this initial value as a double declared variable named value.

The radio buttons are created within the method createRadioButtons() which is in the ConverterFrame class. The program uses an action listener to respond to the user's choice. This then uses a conditional statement to change the contents of the combo boxes in a mutable combo box model. The button createButton() method creates a calculate button to allow the user to convert. An action listener is called by calcButton in which it reads the value within the text field, and the selected combo box. Using if statements and for loops, the program calls the correct conversion methods to calculate the result. The result is then returned as int value and the result label is then updated and set as the result calculation.

