**Temperature Converter Application User Manual**

Welcome to the Temperature Converter application! This program allows you to convert temperatures between Celsius and Fahrenheit easily. This user manual will guide you through the features and functions of the application.

**Table of Contents**

1. Getting Started

• Installation

• Launching the Application

2. Application Overview

• User Interface

3. Using the Application

• Temperature Conversion

• Slider Controls

• Text Fields

• Conversion Buttons

4. Error Handling

• Invalid Input

5. Closing the Application

• Exiting the Application

**1. Getting Started**

**Installation**

The Temperature Converter application does not require installation. You can run it as a Java application on your computer.

**Launching the Application**

To launch the application, follow these steps:

1. Make sure you have Java installed on your computer.
2. Download the Java source code provided or compile it yourself.
3. Open the terminal or command prompt.
4. Navigate to the directory containing the application's source code.
5. Compile and run the program using the following commands:



The Temperature Converter application window should now appear.

**2. Application Overview**

**User Interface**

The application provides a user-friendly interface for temperature conversion. Here's a brief overview of the different parts of the interface:

**Celsius Slider**

* A vertical slider that allows you to select a Celsius temperature. The range is from -30°C to 200°C.

**Fahrenheit Slider**

* A vertical slider that allows you to select a Fahrenheit temperature. The range is from -22°F to 392°F.

**Celsius Text Field**:

* A text field that displays or allows you to input a Celsius temperature.

**Fahrenheit Text Field**

* A text field that displays or allows you to input a Fahrenheit temperature.

**"Convert to Fahrenheit" Button**

* Press this button to convert the entered Celsius temperature to Fahrenheit.

**"Convert to Celsius" Button**

* Press this button to convert the entered Fahrenheit temperature to Celsius.

**Thermometer**

- A visual representation of the temperature in Celsius.

**3. Using the Application**

**Temperature Conversion**

The primary purpose of the Temperature Converter application is to convert temperatures between Celsius and Fahrenheit. Here's how you can perform conversions:

Slider Controls

1. Use the Celsius slider to select a Celsius temperature within the range of -30°C to 200°C.
2. Use the Fahrenheit slider to select a Fahrenheit temperature within the range of -22°F to 392°F.
3. The selected temperature will be reflected in the Celsius text field and the Fahrenheit text field.

Text Fields

1. You can manually enter a temperature value in either the Celsius or Fahrenheit text field.

Conversion Buttons

1. "Convert to Fahrenheit" Button: After entering a Celsius temperature, press this button to convert it to Fahrenheit. The result will be displayed in the Fahrenheit text field.
2. "Convert to Celsius" Button: After entering a Fahrenheit temperature, press this button to convert it to Celsius. The result will be displayed in the Celsius text field.

**4. Error Handling**

**Invalid Input**

The application includes error handling to ensure that the entered temperatures are within valid ranges. If you attempt to convert an invalid temperature, an error message will appear. For example:

* If the Celsius temperature is below -30°C or above 200°C.
* If the Fahrenheit temperature is below -22°F or above 392°F.

**5. Closing the Application**

**Exiting the Application**

To exit the Temperature Converter application, simply click the close button (usually an "X" icon) in the upper-right corner of the application window. This will close the program.

Enjoy using the Temperature Converter application for all your temperature conversion needs! If you have any further questions or encounter issues, feel free to reach out for assistance.