

CS 442: Mobile Applications Development

Assignment 1 – Temperature Converter

Your assignment is to create a Temperature Conversion app as described below.

App Requirements

- The app should allow the user to select either Fahrenheit-to-Celsius or Celsius-to-Fahrenheit conversions. No other conversion selections should be allowed, and one conversion must be selected at any given time (no situation where *no* conversion is selected).
- Your Activity must use a Constraint Layout
- User the following formulae for conversion:
 - $T_{(^{\circ}\text{C})} = (T_{(^{\circ}\text{F})} - 32.0) \times 5.0/9.0$
 - $T_{(^{\circ}\text{F})} = (T_{(^{\circ}\text{C})} \times 9.0/5.0) + 32.0$
- The initial temperature value should be entered by the user.
- Pressing a Convert button should calculate the converted temperature value and display it on the screen. Converted values should be displayed out to 1 decimal place only.
- The conversion operation, value, and calculated results are added to the “history”:
 - Example:
 - F to C: 55.0 → 12.8
 - C to F: 3.5 → 38.3
- The app must look and act consistently in either portrait or landscape orientation.
- Concepts and practices discussed in class must be followed.
- The below is an example of how the app *might* look. *Note, you do NOT need to make yours look like this.* You are free to use your own creativity in designing the UI for this app. The only stipulation is that all the content mentioned above is present in the app.

