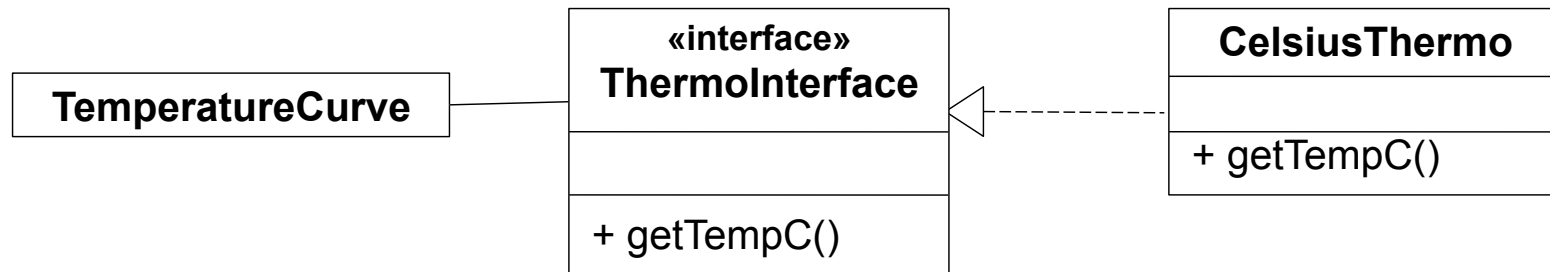


# Task #1: Replace a Broken Thermometer (In-class Exercise)

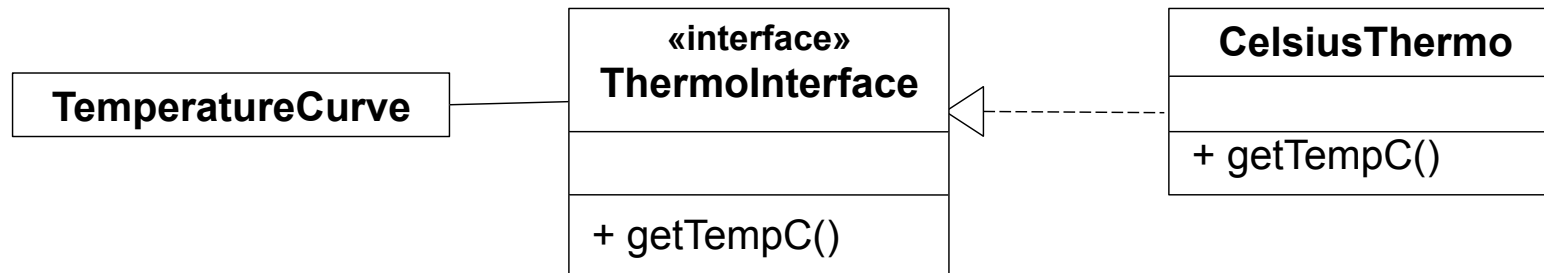
- Problem Statement

- You are on an expedition climbing Denali (6.193 m), one of the coldest mountains on earth. You need to reliably read the outside temperature for the last n hours (temperature curve) in Celsius
- Inside the tent you are using a fancy digital thermometer with software implemented in Java. The program uses a `ThermoInterface` which provides the temperature in Celsius. It connects to the outside thermometer which runs software containing a class called `CelsiusThermo`



- Somebody stepped on your outside Celsius thermometer (`CelsiusThermo`) and broke it
- There is one more thermometer on the expedition, but this measures the temperature in Fahrenheit.

# Task #1: Replace a Broken Thermometer (15 min)



- Your Task - Write an adapter that solves the following problem
  - Reuse the code from the Fahrenheit thermometer (`FahrenheitThermo`) while still providing temperatures in Celsius in `TemperatureCurve`  
$$\text{tempCelsius} = (\text{tempFahrenheit} - 32.0) * (5.0/9.0)$$
  - Constraint: The `TemperatureCurve` code should only be minimally changed
  - Source code for the exercise is offered on Moodle  
PSE → Design Patterns I → Task 1 – Handout
  - Export the Eclipse Project as a zip file
  - Upload the zip file to Moodle:  
PSE → Design Patterns I → Task 1 – Student Solution Upload.