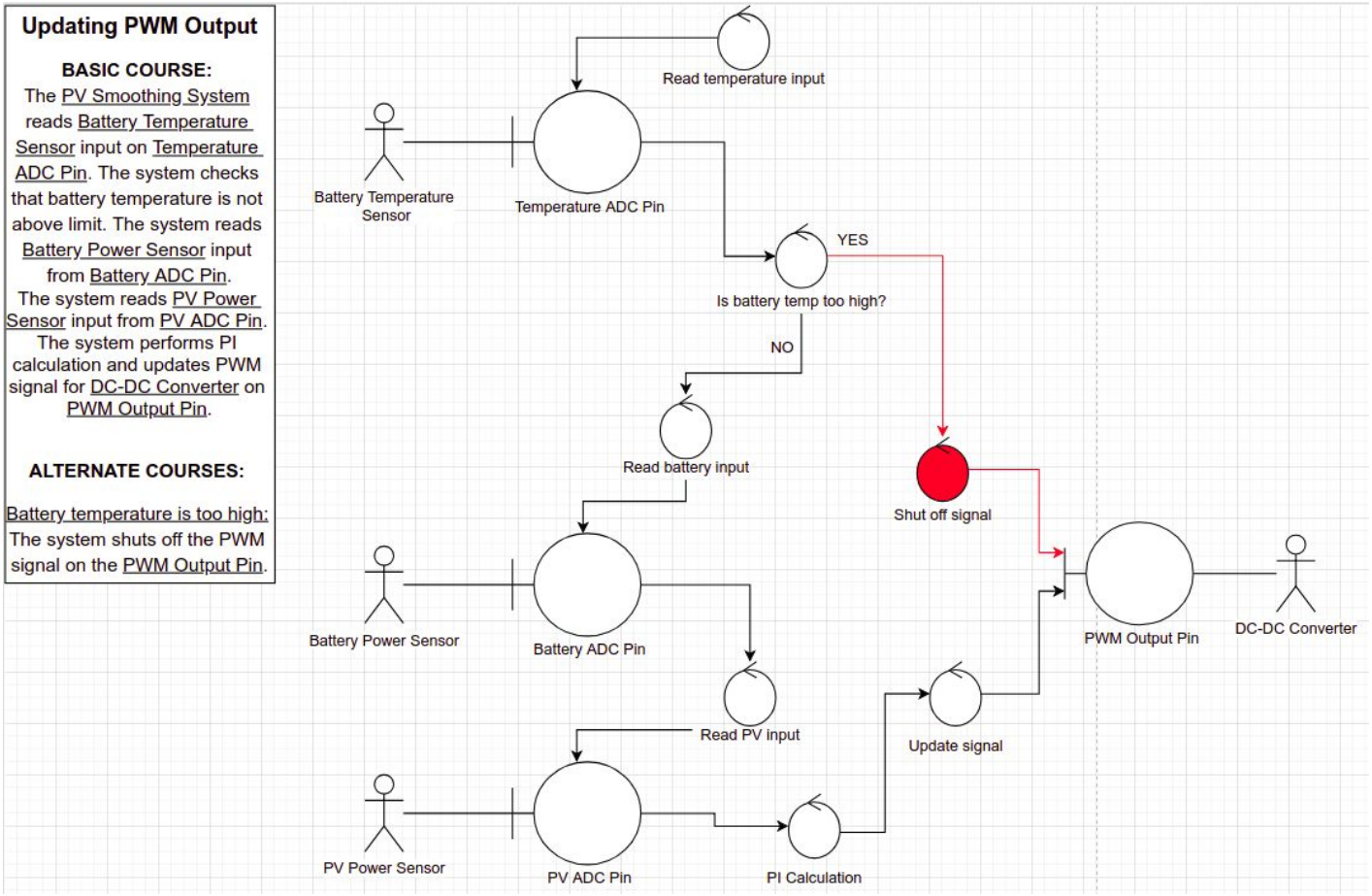
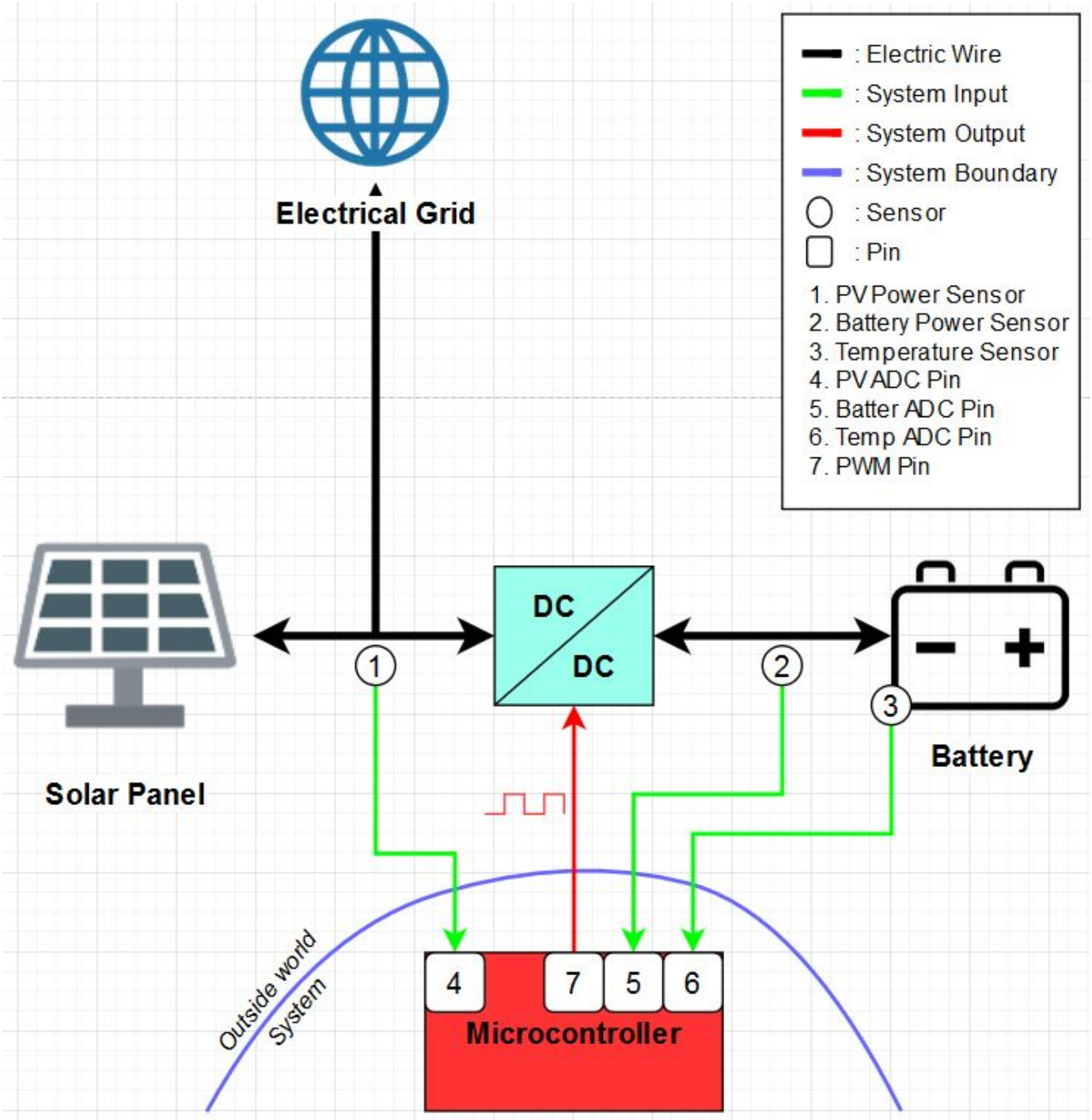
Phase 2

Robustness Diagram



Project Diagram



Sequence Diagram

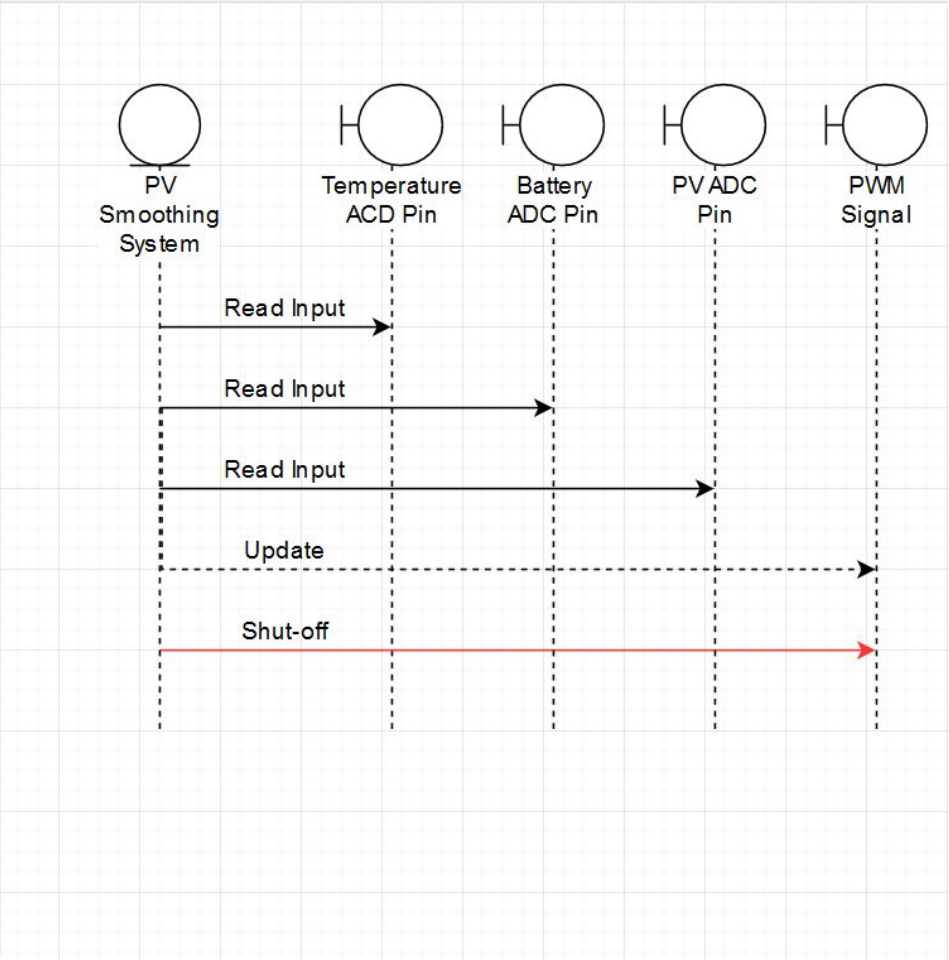
Updating PWM Output

BASIC COURSE:

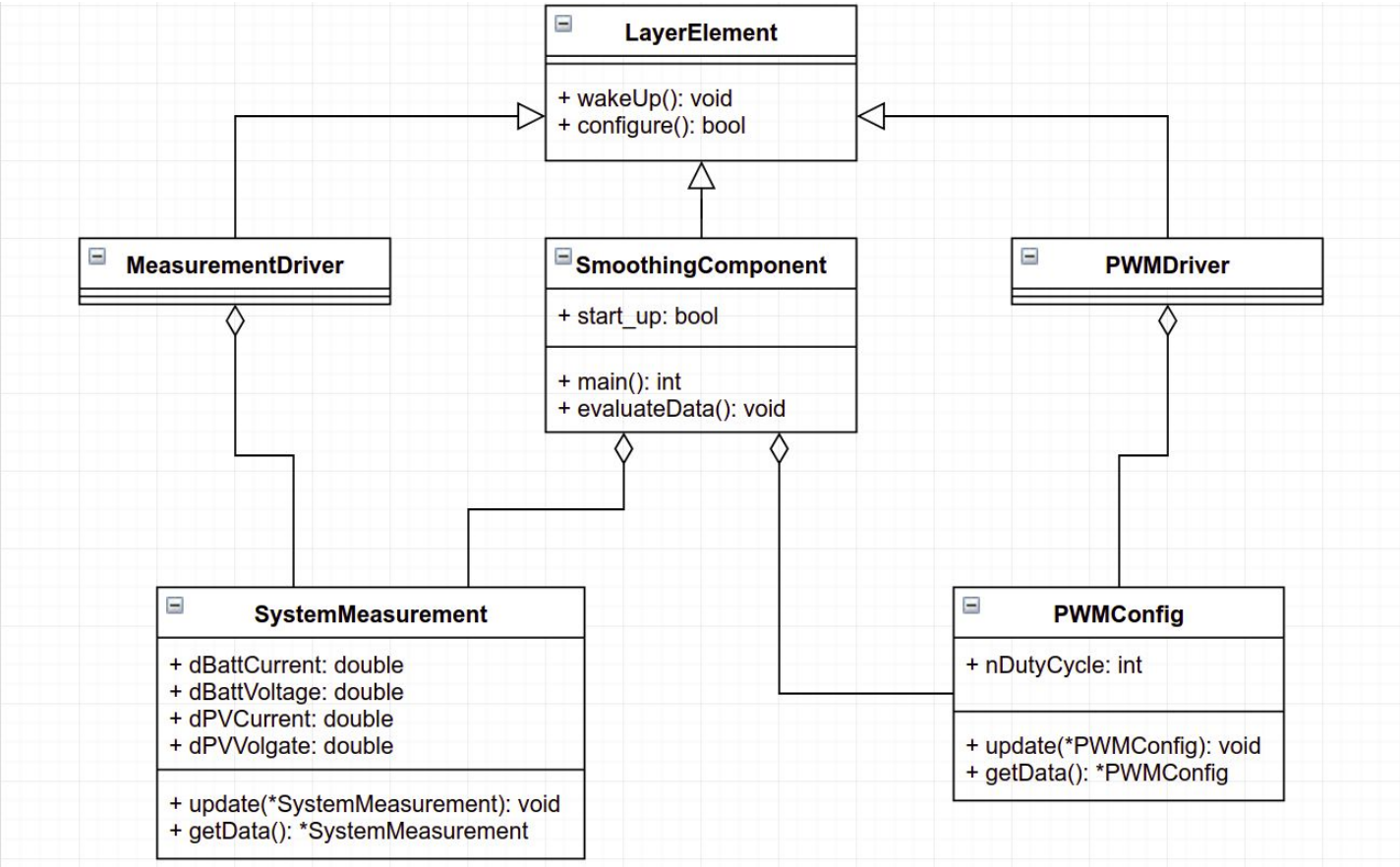
The PV Smoothing System reads Battery Temperature Sensor input on Temperature ADC Pin. The system checks that battery temperature is not above limit. The system reads Battery Power Sensor input from Battery ADC Pin. The system reads PV Power Sensor input from PV ADC Pin. The system performs PI calculation and updates PWM signal for DC-DC Converter on PWM Output Pin.

ALTERNATE COURSES:

Battery temperature is too high: The system shuts off the PWM signal on the PWM Output Pin.



Static Class Diagram



Framework/Tool Kits

Texas Instrument's Code Composer Studio (CCS) and the embedded CCS compiler will be used to develop and debug the software for this project.

System Architecture