**UML class diagrams**

Read more about structuring UML class diagrams here. And for additional help, watch this tutorial about basic UML class diagrams.

**Lucidchart basics**

✧ **Summarize**

⇄ Customize

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**TemperatureController**

- temp_sensor: TemperatureSensor
- fan: Fan
- threshold: float (default 25.0)

+ __init__(temp_sensor: TemperatureSensor, fan: Fan, threshold: float = 25.0) |
+ set_threshold(threshold: float)
+ control_fan()

1 —Monitors→

**TemperatureSensor**

- sensor_pin: int

+ __init__(sensor_pin: int)
+ read_temperature(): float

1 —Controls→

**Fan**

- fan_pin: int

+ __init__(fan_pin: int)
+ turn_on()
+ turn_off()
+ set_speed(speed: int)

0..1

Displays Data

**Display**

+show_text(text:st)
+clear()

**LCDDisplay**

- i2c_address: int (default 0x27)
- rows: int (default 2)
- columns: int (default 16)

+ __init__(i2c_address: int = 0x27, rows: int = 2, columns: int = 16)
+ clear() |
+ write_text(text: str, row: int = 0, col: int = 0) |