

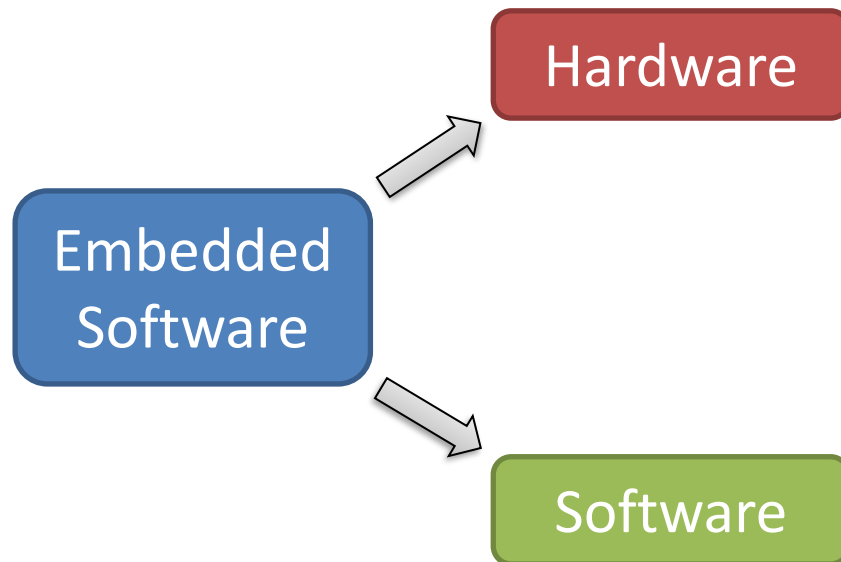
# Introduction

Embedded Software

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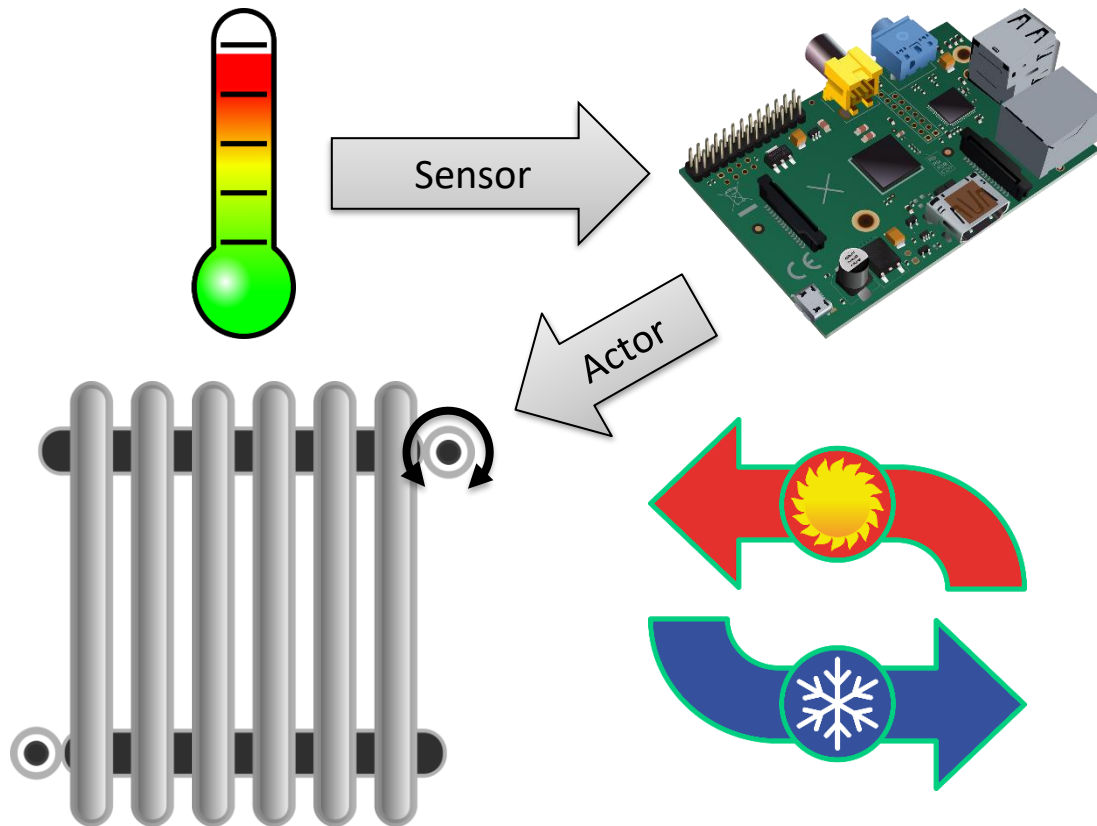
# Embedded Software (1)

- What is embedded software?



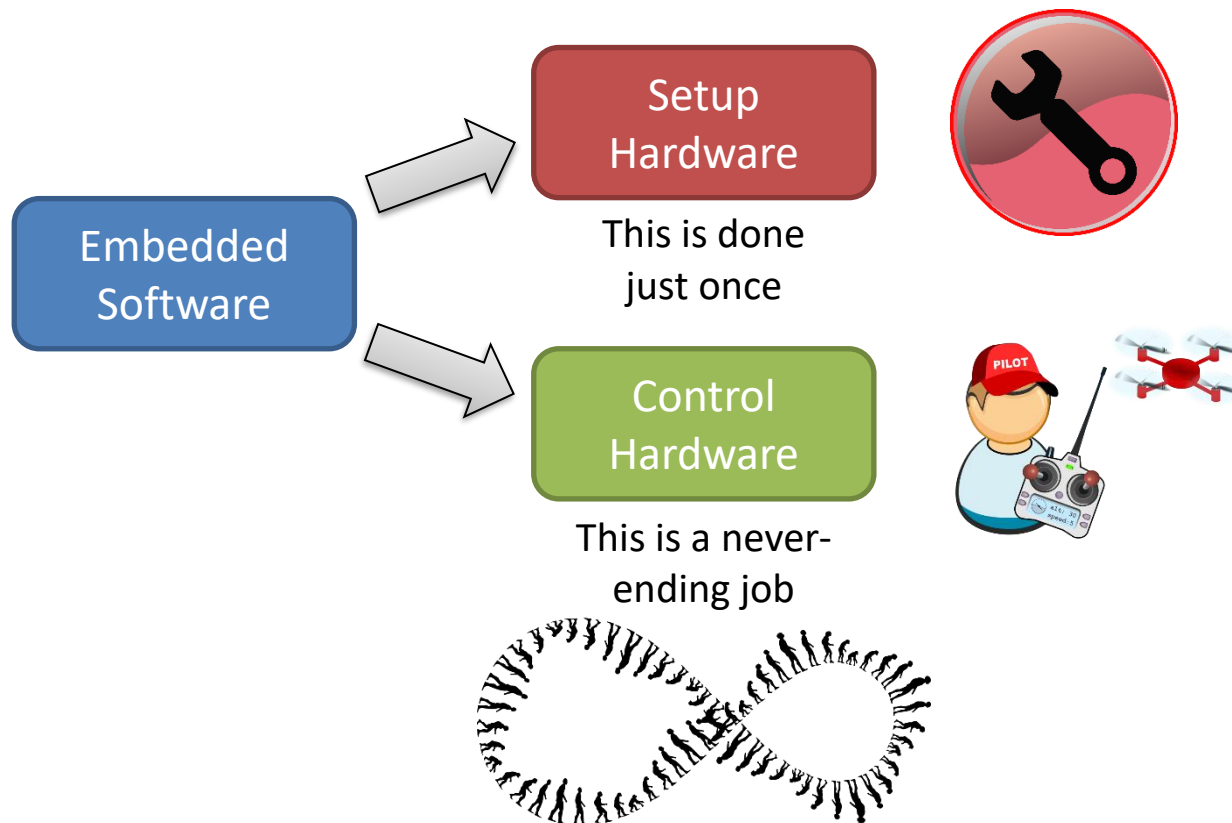
# Embedded Software (2)

- Example: heating control



# Embedded Software (3)

- What does embedded software do?



# Embedded Software (4)

- Arduino's point of view



```
// The setup function runs once
void setup() {
    // Setup hardware
}

// The loop function runs forever
void loop() {
    // Do the control job
}
```

# Embedded Software (5)

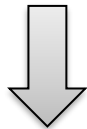
- C's point of view



```
int main(void)
{
    // Setup hardware
    for (;;) {
        // This is an infinite loop
        // Do the control job
    }
}
```

# Embedded Software (6)

- Arduino's way with C



```
void setup() {  
}  
void loop() {  
}  
int main(void)  
{  
    // Setup hardware  
    setup();  
    for (;;) {  
        // Do the control job  
        loop();  
    }  
}
```