Procedural Code
Consider the example in the Digital Output tutorial with the blinking LED. The code for this example was written in a procedural way:

1. Set the output pin to the current state of the LED
2. Flip the current state of the LED
3. Wait for 1 second
4. Goto step 1

This code is very straightforward for simple models.

Thought Experiment
How would you write a program to blink two LEDs at different rates, e.g. with periods 1000ms and 1100ms?

• What if you had three LEDs with periods of 1000ms, 1100ms, and 1110ms? Would your algorithm still work
• What if you had an unknown number of LEDs, each with an unknown period? Would your algorithm still work?

Event-Driven Code
+Possible Solution (show/hide) [?
CTimeout Class

External Example
For another example of how to accomplish blinking without using the delay function, see the Blink Without Delay example on Arduino.cc.