Embedded Systems: Final Project
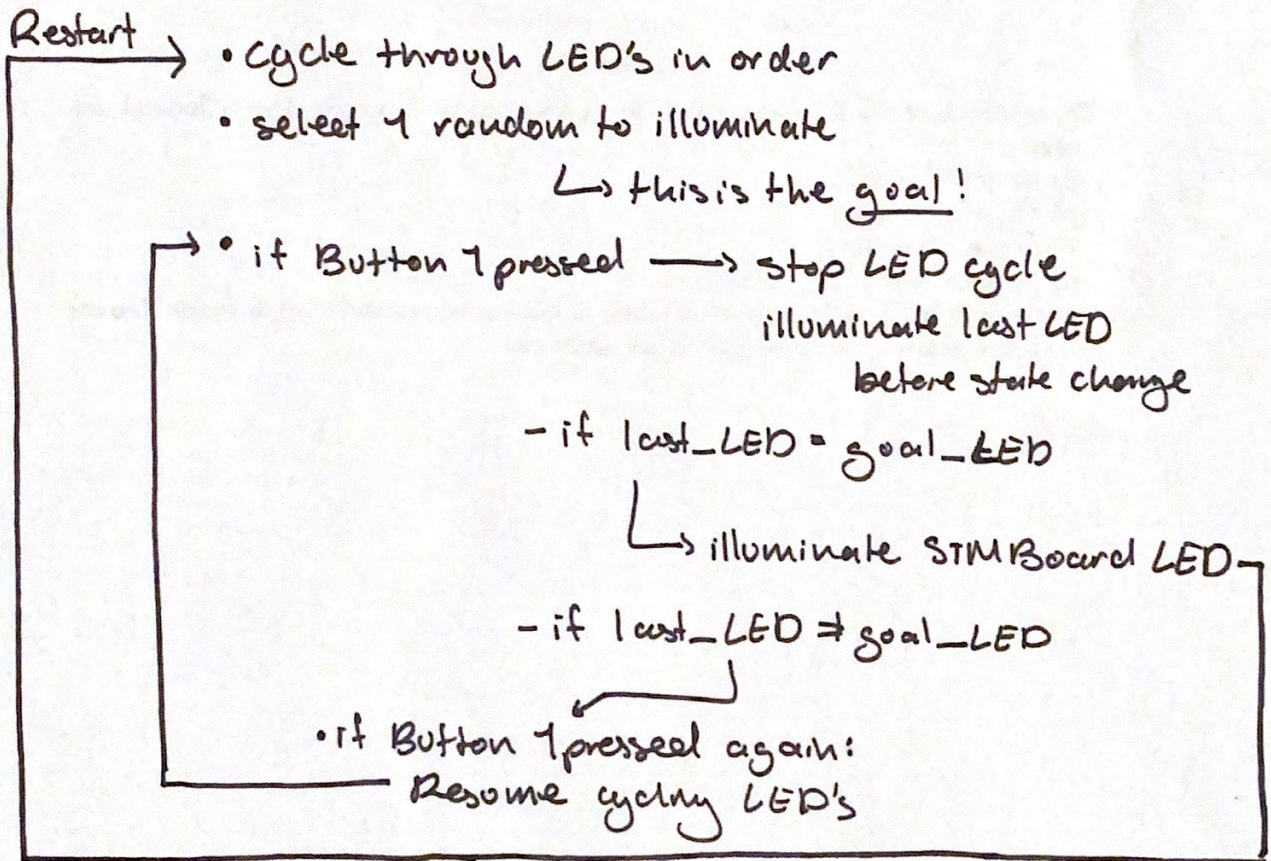
{Code: Flow Chart}

while (1)

{Always Check} • if Button 2 pressed ——→ Decrease delay time
(speed/slow game mode)

Restart ——→ • cycle through LED's in order
• select 1 random to illuminate
↳ this is the goal!

• if Button 1 pressed ——→ stop LED cycle
illuminate last LED
before state change

– if last_LED = goal_LED

↳ illuminate STM Board LED

– if last_LED ≠ goal_LED

• if Button 1 pressed again:
Resume cycling LED's

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{Block Diagram}

STM32

PA1 — Button1 — 3V, 330Ω

PA2 — Button2 — 330Ω, 3V

PA3... PE8...

LD1 → ... → LD10   330Ω