**Manual + Automatic Fan Controller**

Fan is controlled through two means of input, a temperature sensor and a joystick.

The temperature sensor will set the speed of the fan automatically, whereas the joystick allows the user to manually select a fan speed.

The fan has three speeds, with LEDs letting the user know what speed is selected.

Assume that the joystick is something more design-friendly, such as arrow buttons on an air conditioning system (may change from joystick to simple buttons for simplicity).

The fan and DC motor simulate an air conditioning fan for a car or house cooling or heating system.

Components:

Temperature sensor

Joystick/switches

Fan + DC Motor

LEDs (3 at minimum)

