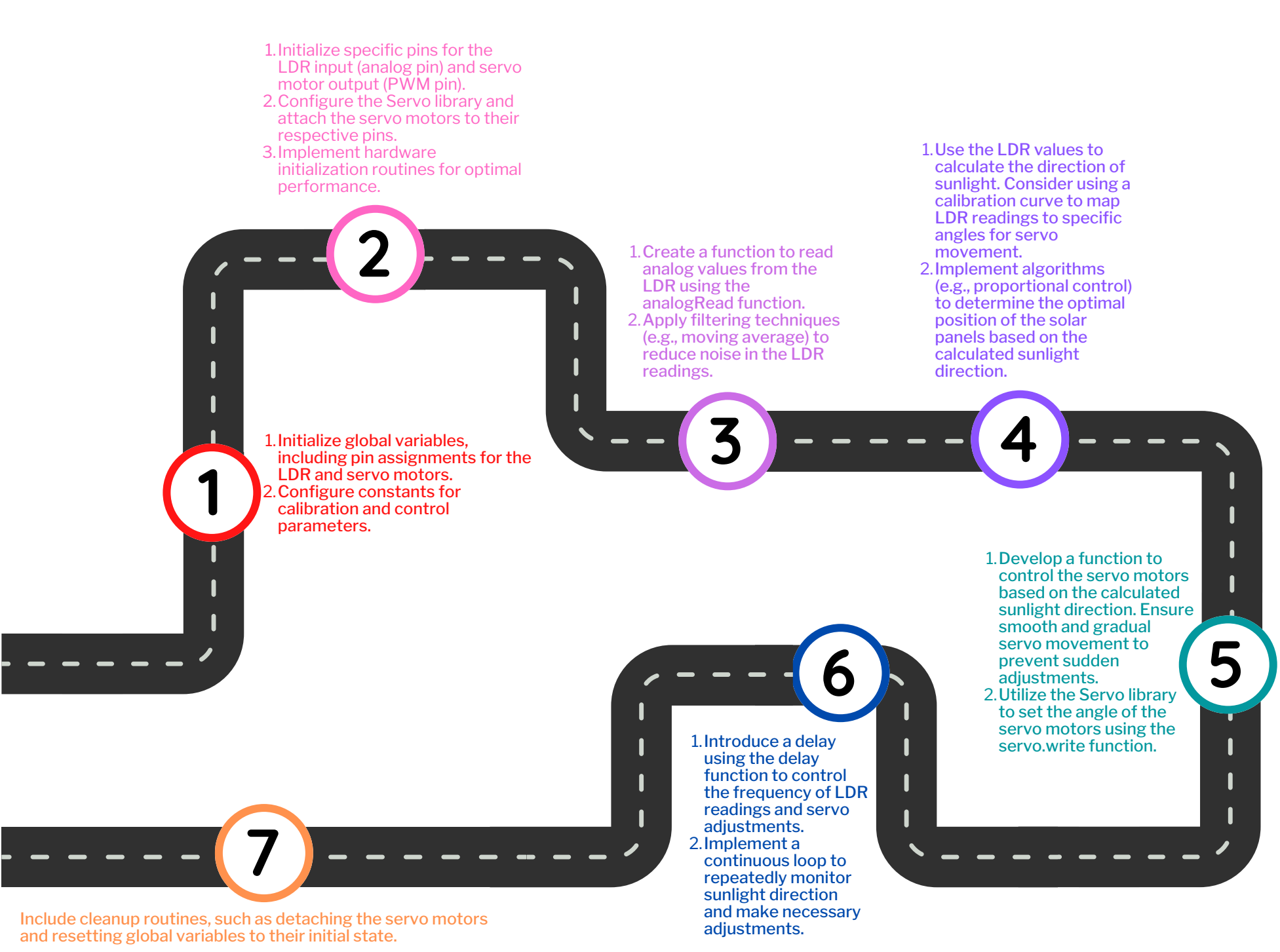
1. Initialize specific pins for the LDR input (analog pin) and servo motor output (PWM pin).
2. Configure the Servo library and attach the servo motors to their respective pins.
3. Implement hardware initialization routines for optimal performance.
2
1. Create a function to read analog values from the LDR using the analogRead function.
2. Apply filtering techniques (e.g., moving average) to reduce noise in the LDR readings.
3
1. Use the LDR values to calculate the direction of sunlight. Consider using a calibration curve to map LDR readings to specific angles for servo movement.
2. Implement algorithms (e.g., proportional control) to determine the optimal position of the solar panels based on the calculated sunlight direction.
4
1
1. Initialize global variables, including pin assignments for the LDR and servo motors.
2. Configure constants for calibration and control parameters.
1. Develop a function to control the servo motors based on the calculated sunlight direction. Ensure smooth and gradual servo movement to prevent sudden adjustments.
2. Utilize the Servo library to set the angle of the servo motors using the servo.write function.
5
6
1. Introduce a delay using the delay function to control the frequency of LDR readings and servo adjustments.
2. Implement a continuous loop to repeatedly monitor sunlight direction and make necessary adjustments.
7
Include cleanup routines, such as detaching the servo motors and resetting global variables to their initial state.