



Notes:

Normal Operation: The device starts here and periodically reports data to the server. It also constantly monitors for movement.

Classify Movement: Based on the detected movement, it classifies the condition as normal, windy, or collision.

Report Data to Server: Regular environmental data reporting. If no acknowledgment (ACK) is received, it enters an error state.

Error State: Entered if the device does not receive an ACK from the server. Exits this state once an ACK is received.

Windy Condition: If movement indicates wind, it reports this condition to the server and resets to normal upon ACK.

Collision Detected: On detecting a collision-level movement, it remains in this state until the middle button is pressed.