

The intended robot behavior is of a robot waiting for a friend in an unfamiliar place who is quite scared of strangers.

IdleState: Turning to no color and not moving.

Transitions to SpinningState if the detected person is "phi" (label 0).

Transitions to ScaredState if the detected person is not "phi".

Transitions to IdleState if no other transitions are triggered.

SpinningState: Turning Green and spinning in place.

Transitions to DancingState after completing the spin.

Transitions to ScaredState if the detected person is not "phi" during the spin.

DancingState: Turning Yellow and spinning in place.

Transitions to StoppingState after the dance is complete.

Transitions to ScaredState if the detected person is "Unknown" during the dance.

StoppingState: Turning red and not moving.

Transitions to IdleState after stopping.

Transitions to ScaredState if the detected person is "Unknown".

ScaredState: Turning Magenta and spinning away very fast..

Transitions to DancingState if the detected person is "phi" after being scared.

Transitions to IdleState if no familiar person is detected after being scared.

