

Robot Movement

A menu is displayed to the user asking for input for robot movement. The menu reads, up arrow = forward, left arrow = left, back arrow = backward, right arrow = right, 1= exit 0=radar sweep

Initial Test Case Results

<u>Input</u>	<u>Expected Output</u>	<u>Output</u>
Up	robot goes forward	Success
Left	robot turns left	Success
Down	robot goes backward	Success
Right	robot turns right	Success
0	radar sweep	Failure
1	program exits	Success

Robot Sensor

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
Sensor data to display	print angle of the object	Success

Sync/ Integrating system

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
Object to radar/map	Draw a red,yellow, green dot [Red- Object >15] [Yellow- 15<Object >35] [Green- Object >35]	Success
Robot Movement to object	change dot according to direction of the robot movement	Failure
Sensor Update	update dot location	Failure

GUI

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
sensor/servo scanning	Use the servo angle movement to print Radar grid	Success
Initial Sensor data to radar	print dot on the radar grid	Success
Movement after scanning object	Robot keeps track of object and obstacle movement	Failure

RobotCamera

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
Camera input	live feed into UI	Failure

FINAL TEST CASE RESULTS

<u>Input</u>	<u>Expected Output</u>	<u>Output</u>
Up	robot goes forward	Success
Left	robot turns left	Success
Down	robot goes backward	Success
Right	robot turns right	Success
0	radar sweep	Success
1	program exits	Success

Robot Sensor

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
Sensor data to display	print angle of the object	Success

Sync/ Integrating system

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
Object to radar/map	Draw a red,yellow, green dot [Red- Object >15] [Yellow- 15<Object >35] [Green- Object >35]	Success
Robot Movement to object	change dot according to direction of the robot movement	Success
Sensor Update	update dot location	Success

GUI

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
sensor/servo scanning	Use the servo angle movement to print Radar grid	Success
Initial Sensor data to radar	print dot on the radar grid	Success
Movement after scanning object	Robot keeps track of object and obstacle movement	Success

RobotCamera

<u>Input</u>	<u>Expected output</u>	<u>Output</u>
Camera input	live feed into UI	Failure