Group 3: Voice-Controlled Robot Assignment 4: Code Testing 6 April 2024

Test cases for voicerobots-server/src/decisionmaker.py

Test Case ID: 1

Test Priority (Low/Medium/High): High

Module Name: decisionmaker.py

Test Designed & Executed By: Japheth Beiler

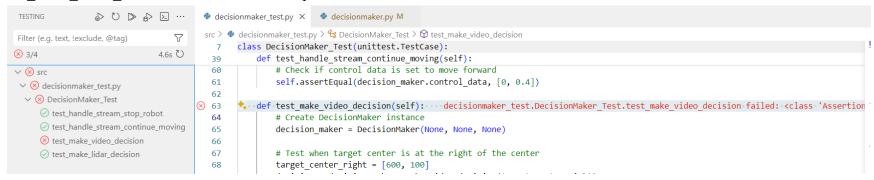
Test Design Date: 4 April 2024

Step	Test Name	Class & Method	Test Data/ Parameters	Expected Result	Actual Result	Status (Pass/ Fail)	Comments
1	test_handle_stream_sto p_robot	Class: DecisionMaker Method: _handle_stream	target_center: [480, 100] lidar_scan: [90, 100, 70]	control_data: [0, 0]	control_data: [0, 0]	Pass	
2	test_handle_stream_co ntinue_moving	Class: DecisionMaker Method: _handle_stream	target_center: [480, 100] lidar_scan: [60, 80, 110]	control_data: [0, 0.4]	control_data: [0, 0.4]	Pass	
3	test_make_video_decis ion	Class: DecisionMaker Method: _make_video_decision	target_center: [600, 100]	video_control_decision: [0.125, 0]	video_control_decision: [0.125, 0]	Pass	

4	test_make_video_decis ion	Class: DecisionMaker Method: _make_video_decision	target_center: [300, 100]	video_control_decision: [-0.1875, 0]	video_control_ decision: [-0.1875, 0]	Pass	
5	test_make_video_decis ion	Class: DecisionMaker Method: _make_video_decision	target_center: [480, 100]	video_control_ decision: [0, 0.4]	video_control_ decision: [0, 0.4]	Pass	
6	test_make_video_decis ion	Class: DecisionMaker Method: _make_video_decision	target_center: [0, 0]	video_control_decision: [0, 0]	video_control_ decision: None	Fail	Returning "None" here won't break anything, but it should probably be fixed
7	test_make_lidar_decisi on	Class: DecisionMaker Method: _make_lidar_decision	lidar_scan: []	stop_robot: False	stop_robot: False	Pass	
8	test_make_lidar_decisi on	Class: DecisionMaker Method: _make_lidar_decision	lidar_scan: [[60, 80, 110]]	stop_robot: False	stop_robot: False	Pass	
9	test_make_lidar_decisi on	Class: DecisionMaker Method: _make_lidar_decision	lidar_scan: [[90, 100, 70]]	stop_robot: True	stop_robot: True	Pass	

Screenshots

test make video decision fails because of Step 6:



With Step 6 commented out, all tests pass:

```
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                                                                                                                         decisionmaker_test.py M X decisionmaker.py M
   TESTING
                                                                                                                          src > decisionmaker test.pv > decisionMaker Test > 
 Filter (e.g. text, !exclude, @tag)
                                                                                                                                              class DecisionMaker Test(unittest.TestCase):
4.6s 🖰
                                                                                                                                                           def test make video decision(self): decisionmaker test.DecisionMaker Test.test make video decision failed: <class 'Assert
                                                                                                                              63
∨ Ø src
                                                                                                                              76

∨ ⊘ decisionmaker_test.py

                                                                                                                              77
                                                                                                                                                                        # Test when target center is at the center
                                                                                                                              78
                                                                                                                                                                        target_center_center = [480, 100]

∨ Ø DecisionMaker_Test

                                                                                                                                                                        decision = decision maker. make video decision(target center center)
                                                                                                                              79
                self.assertEqual(decision, [0, 0.4])
                                                                                                                              80
                otest handle stream continue moving
                                                                                                                              81
                test make video decision
                                                                                                                              82
                                                                                                                                                                        '''# Test when target center is [0, 0]
                test make lidar decision
                                                                                                                                                                        target center zero = [0, 0]
                                                                                                                              83
                                                                                                                                                                        decision = decision_maker._make_video_decision(target_center_zero)
                                                                                                                              84
                                                                                                                              85
                                                                                                                                                                        self.assertEqual(decision, [0, 0])'''
                                                                                                                              86
                                                                                                                                                           def test make lidar decision(self):
                                                                                                                             87
                                                                                                                                                                       # Create DecisionMaker instance
```