Functional Test Specification

Test-1: Verify functionality of .git/HEAD

Expected Result: Works as intended.

Test-2: Verify functionality of .git/config

Expected Result: Works as intended.

Test-3: Verify functionality of .git/description

Expected Result: Works as intended.

Test-4: Verify functionality of .git/index

Expected Result: Works as intended.

Test-5: Verify functionality of .git/info/exclude

Expected Result: Works as intended.

Test-6: Verify functionality of .git/logs/HEAD

Expected Result: Works as intended.

Test-7: Verify functionality of .git/logs/refs/heads/main

Expected Result: Works as intended.

Test-8: Verify functionality of .git/logs/refs/remotes/origin/HEAD

Expected Result: Works as intended.

Test-9: Verify functionality of .git/packed-refs

Expected Result: Works as intended.

Test-10: Verify functionality of .git/refs/heads/main

Expected Result: Works as intended.

Test-11: Verify functionality of .git/refs/remotes/origin/HEAD

Expected Result: Works as intended.

Test-12: Verify functionality of LICENSE

Expected Result: Works as intended.

Test-13: Verify functionality of Makefile

Expected Result: Works as intended.

Test-14: Verify functionality of backend/api\_server/main.py

Expected Result: Works as intended.

Test-15: Verify functionality of backend/data\_streamer/main.py

Expected Result: Works as intended.

Test-16: Verify functionality of backend/data\_streamer/vehicle\_pose.py

Expected Result: Works as intended.

Test-17: Verify functionality of backend/dev\_scripts/mock\_backend.py

Expected Result: Works as intended.

Test-18: Verify functionality of backend/install/\_local\_setup\_util\_ps1.py

Expected Result: Works as intended.

Test-19: Verify functionality of backend/install/\_local\_setup\_util\_sh.py

Expected Result: Works as intended.

Test-20: Verify functionality of backend/requirements.txt

Expected Result: Works as intended.

Test-21: Verify functionality of backend/ros2\_nodes/ros2\_nodes/slam\_node/CMakeLists.txt

Expected Result: Works as intended.

Test-22: Verify functionality of backend/ros2\_nodes/ros2\_nodes/slam\_node/src/slam\_logic.cpp

Expected Result: Works as intended.

Test-23: Verify functionality of docs/rest\_api.md

Expected Result: Works as intended.

Test-24: Verify functionality of docs/websocket\_api.md

Expected Result: Works as intended.

Test-25: Verify functionality of frontend/Dockerfile

Expected Result: Works as intended.

Test-26: Verify functionality of frontend/README.md

Expected Result: Works as intended.

Test-27: Verify functionality of frontend/public/robots.txt

Expected Result: Works as intended.

Test-28: Verify functionality of frontend/src/App.js

Expected Result: Works as intended.

Test-29: Verify functionality of frontend/src/App.test.js

Expected Result: Works as intended.

Test-30: Verify functionality of frontend/src/components/MapView.js

Expected Result: Works as intended.

Test-31: Verify functionality of frontend/src/components/SystemHealthPanel.js

Expected Result: Works as intended.

Test-32: Verify functionality of frontend/src/index.js

Expected Result: Works as intended.

Test-33: Verify functionality of frontend/src/reportWebVitals.js

Expected Result: Works as intended.

Test-34: Verify functionality of frontend/src/services/apiService.js

Expected Result: Works as intended.

Test-35: Verify functionality of frontend/src/services/websocketService.js

Expected Result: Works as intended.

Test-36: Verify functionality of frontend/src/setupTests.js

Expected Result: Works as intended.

Test-37: Verify functionality of rest\_api.md

Expected Result: Works as intended.

Test-38: Verify functionality of websocket\_api.md

Expected Result: Works as intended.