

| Test Scenario Number: | 001 | Tested By: | Ryan Bomalaski |
|---|--------|---|----------------|
| Sprint Number: | 1 | Application: | main.py |
| Tracker ID: | ST-001 | Time Estimation: | 30 Minutes |
| Module: | N/A | Type: | Stepwise |
| Test Scenario and Requirements Description: Tester will run test script test_001.sh to test Scenario 1. Prerequisites: <ul style="list-style-type: none"> User has Collision Avoidance folder User has SQLite3 Installed | | | |
| Scenario Title: Run Simulator for 120 Steps with resolution of 2 steps per second. Scenario Procedure: Using the provided scripts, the user will import the test airplanes to the python algorithm. Then the user will run the simulator for 120 steps. | | | |
| Scenario Steps: | | Validation: | |
| Create Airplane Test Database: <ol style="list-style-type: none"> Open New Terminal Navigate to ../collision_avoidance/test_scripts Run command: <ol style="list-style-type: none"> ./test_001.sh | | SQLite will initialize with test attributes. The terminal will open the python terminal (Denoted with the ">>>").* * - Note: If this is the first set up of the table, two errors will appear. | |
| Create Simulator object and populate with Airplanes: <ol style="list-style-type: none"> Create a new simulator object with step count of 120 by typing the following command: <ol style="list-style-type: none"> sim = Simulator(120,2) Populate the simulator with aircraft by running: <ol style="list-style-type: none"> sim.create_airplanes() Confirm that two airplanes were created by running: <ol style="list-style-type: none"> sim.airplanes | | A list with one airplane object and its address in memory will appear. | |
| Run Simulator: <ol style="list-style-type: none"> In python environment, run the following command: <ol style="list-style-type: none"> sim.run_sim() When the simulator is complete, run: <ol style="list-style-type: none"> exit() | | The simulator will step through 120 steps, giving outputs for both airplanes. Upon exit, the user will be back at the linux terminal. | |