# **System Test Plan**

Instructions. In this section, you must provide your system test plan with at least 5 test cases. If you want to provide more than 5 test cases, add an appendix at the end of this document with the 6th, 7th, etc. test cases so that page numbers for all sections match the required template! Only the first 5 test cases will be graded.

### Make sure:

- You provide your sample test data
- Test IDs are uniquely identified and descriptive
- Test descriptions are fully specified with complete inputs, specific values, and preconditions
  - Be sure to provide <u>SPECIFIC</u> INPUTs and VALUEs so that your test cases are repeatable
- Expected results are fully specified with specific output values
- All tests cover scenarios based on the problem statement
- All tests cover unique scenarios for the system
- All strategies for system testing are demonstrated in the tests (testing equivalence classes, testing boundary values, testing exceptions/unexpected inputs)

#### Test Data:

We will use three test file for our System Test Plan: people.csv and calls.csv, and empty emptyCalls.csv

People.csv

## PHONE\_NUMBER, FIRST\_NAME, LAST\_NAME

134-530-7421728, Roseanna, Herman

853-257-0109509, Sarai, Rodriguez

358-721-0140950, Tereasa, Kuphal

663-879-6377778, Rudolph, Buckridge

541-777-4740981, Brett, Mueller

289-378-3996038, Daniel, Walker

903-282-4112077, Tomas, Nguyen

881-633-0099232, Enoch, Quitzon

442-000-9865092, Albertina, Braun

Calls.csv

## CALL\_ID, TIMESTAMP, CALL\_LENGTH, PHONE\_NUMBERS

EHEI9930, Wed Apr 22 14:56:45 EDT 2020, 29, 358-721-0140950 | 663-879-6377778

IIIL0182, Mon Sep 29 14:03:37 EDT 2014, 82, 358-721-0140950 | 541-777-4740981

RIFU0090, Sun May 14 10:52:47 EDT 2017, 24, 663-879-6377778 | 541-777-4740981 | VFTD2516, Mon Sep 02 10:11:43 EDT 2019, 39, 541-777-4740981 | 134-530-7421728 | JAID5291, Mon Sep 09 11:10:34 EDT 2019, 22, 289-378-3996038 | 134-530-7421728 | APAF2182, Mon Sep 22 14:03:37 EDT 2014, 2, 289-378-3996038 | 881-633-0099232 | NANS7122, Wed Apr 29 19:26:35 EDT 2020, 5, 442-000-9865092 | 663-879-6377778 | 903-282-4112077

emptyCalls.csv

CALL\_ID, TIMESTAMP, CALL\_LENGTH, PHONE\_NUMBERS

# To start the program, run surveillanceManagerUI.java

| Test ID | Description | Expected Results | Actual Results |
|---------|-------------|------------------|----------------|

| Test #1 testID: testLoadPeo       | Preconditions:  • surveillanceManagerUI.j  ava has been loaded                                | The people list loads to display the nine people in sorted order by their phone numbers | 134-530-7421728 (Roseanna<br>Herman)<br>289-378-3996038 (Daniel Walker)<br>358-721-0140950 (Tereasa Kuphal)<br>442-000-9865092 (Albertina Braun) |
|-----------------------------------|---|---|--|
| ple                               | successfully • input/people.txt exist   | 134-530-7421728 (Roseanna<br>Herman)  | 541-777-4740981 (Brett Mueller)<br>663-879-6377778 (Rudolph<br>Buckridge)  |
| Strategy:<br>Equivalence          | • input/calls.txt   | 289-378-3996038 (Daniel Walker)   | 853-257-0109509 (Sarai Rodriguez)<br>881-633-0099232 (Enoch Quitzon)<br>903-282-4112077 (Tomas Nguyen)   |
| Class -<br>loading<br>people from | Steps: 1. See "Type anything to   | 358-721-0140950 (Tereasa<br>Kuphal)   |  |
| file                              | continue, type stop to end application"   | 442-000-9865092 (Albertina  |  |
|                                   | <ol> <li>Type anything</li> <li>See "People file?"</li> <li>Type "input/people.csv</li> </ol> | Braun)<br>541-777-4740981 (Brett Mueller)   |  |
|                                   | 5. See "Call file?" 6. Type "input/calls.csv"   | 663-879-6377778 (Rudolph  |  |
|                                   | 7. See "See people? [y/n]" 8. Type "y"  | Buckridge)<br>853-257-0109509 (Sarai  |  |
|                                   | 9. Check output<br>10. Type "stop"  | Rodriguez)  |  |
|                                   |   | 881-633-0099232 (Enoch Quitzon)   |  |
|                                   |   | 903-282-4112077 (Tomas Nguyen)  |  |

| Test #2 testID: testLoadWar rant Strategy: Equivalence class - | Preconditions:  • surveillanceManagerUI.j ava has been loaded successfully • people.txt • call.txt exists  Steps:  1. See "Type anything to continue, type stop to end application" 2. Type anything 3. See "People file?"  | Phone numbers covered by a 4-hop warrant originating from 358-721-0140950 (Tereasa Kuphal) [ 1-hop: 663-879-6377778 (Rudolph Buckridge) 1-hop: 541-777-4740981 (Brett Mueller) 2-hop: 442-000-9865092 | Phone numbers covered by a 4-hop warrant originating from 358-721-0140950 (Tereasa Kuphal) [ 1-hop: 663-879-6377778 (Rudolph Buckridge) 1-hop: 541-777-4740981 (Brett Mueller) 2-hop: 442-000-9865092 (Albertina Braun) 2-hop: 134-530-7421728 (Roseanna Herman) 2-hop: 903-282-4112077 (Tomas Nguyen) 3-hop: 289-378-3996038 (Daniel Walker) 4-hop: 881-633-0099232 (Enoch |
|--|---|---|---|
| examining the results of getPeopleCo veredByWarr ant.java)     | <ol> <li>See "People file?"</li> <li>Type "input/people.csv</li> <li>See "Call file?"</li> <li>Type "input/calls.csv"</li> <li>See "See people? [y/n]"</li> <li>Type "n"</li> <li>See"Generate report?         <ul> <li>[y/n]"</li> </ul> </li> <li>Type "n"</li> <li>See "Generate warrant?             <ul> <li>[y/n]"</li> <li>See "Hops"</li> </ul> </li> </ol> | (Albertina Braun)  2-hop: 134-530-7421728 (Roseanna Herman)  2-hop: 903-282-4112077 (Tomas Nguyen)  3-hop: 289-378-3996038 (Daniel Walker)  | Quitzon)  |

|   | 14. Type "4" 15. See "number 16. Type "358-721-0140950" 17. Check result 18. Type "stop"  | 4-hop: 881-633-0099232 (Enoch Quitzon) ]  |  |
|---|---|---|--|
| Test #3  testID: testGenerate Report  Strategy: (Equivalence class - examining the results of | Preconditions: Test 1 has passed  Steps:  1. See "Type anything to continue, type stop to end application"  2. Type anything  3. See "People file?"  4. Type "input/people.csv  5. See "Call file?"  6. Type "input/calls.csv"  7. See "See people? [y/n]"  8. Type "n" | The following report would be generated  Calls involving 134-530-7421728 (Roseanna Herman) [  9/2/2019 at 10:11:43 AM involving 1 other number(s):  541-777-4740981 (Brett Mueller)  9/9/2019 at 11:10:34 AM involving 1 other number(s): | Calls involving 134-530-7421728 (Roseanna Herman) [ 9/2/2019 at 10:11:43 AM involving 1 other number(s): 541-777-4740981 (Brett Mueller) 9/9/2019 at 11:10:34 AM involving 1 other number(s): 289-378-3996038 (Daniel Walker) ] Calls involving 289-378-3996038 (Daniel Walker) [ 9/22/2014 at 14:03:37 PM involving 1 other number(s): 881-633-0099232 (Enoch Quitzon) 9/9/2019 at 11:10:34 AM involving 1 other number(s): 134-530-7421728 (Roseanna Herman) |

| generateRep<br>ort.java) | 9. See"Generate report? [y/n]" 10. Type "y" 11. Check results 12. Type "stop | 289-378-3996038 (Daniel Walker)  Calls involving 289-378-3996038 (Daniel Walker) [  9/22/2014 at 14:03:37 PM involving 1 other number(s):  881-633-0099232 (Enoch Quitzon)  9/9/2019 at 11:10:34 AM involving 1 other number(s):  134-530-7421728 (Roseanna Herman)  Continued in Appendix | Calls involving 358-721-0140950 (Tereasa Kuphal) [ 9/29/2014 at 14:03:37 PM involving 1 other number(s): 541-777-4740981 (Brett Mueller) 4/22/2020 at 14:56:45 PM involving 1 other number(s): 663-879-6377778 (Rudolph Buckridge)  Calls involving 442-000-9865092 (Albertina Braun) [ 4/29/2020 at 19:26:35 PM involving 2 other number(s): 663-879-6377778 (Rudolph Buckridge) 903-282-4112077 (Tomas Nguyen)  Calls involving 541-777-4740981 (Brett Mueller) [ 9/29/2014 at 14:03:37 PM involving 1 other number(s): 358-721-0140950 (Tereasa Kuphal) 5/14/2017 at 10:52:47 AM involving 1 other number(s): 663-879-6377778 (Rudolph Buckridge) 9/2/2019 at 10:11:43 AM involving 1 other number(s): 134-530-7421728 (Roseanna Herman)  Calls involving 663-879-6377778 (Rudolph Buckridge) [ |
|--------------------------|--|--|--|
|--------------------------|--|--|--|

| 5/14/2017 at 10:52:47 AM involving 1 other number(s):         541-777-4740981 (Brett Mueller) 4/22/2020 at 14:56:45 PM involving 1 other number(s):         358-721-0140950 (Tereasa Kuphal) 4/29/2020 at 19:26:35 PM involving 2 other number(s):         442-000-9865092 (Albertina Braun)         903-282-4112077 (Tomas Nguyen) ] Calls involving 853-257-0109509 (Sarai Rodriguez) [         (none) ] Calls involving 881-633-0099232 (Enoch Quitzon) [         9/22/2014 at 14:03:37 PM involving 1 other number(s):         289-378-3996038 (Daniel Walker) ] Calls involving 903-282-4112077 (Tomas Nguyen) [         4/29/2020 at 19:26:35 PM involving 2 other number(s): |
|---|
| (Tomas Nguyen) [ 4/29/2020 at 19:26:35 PM involving 2 other number(s):  |
| 442-000-9865092 (Albertina Braun) 663-879-6377778 (Rudolph  |
| Buckridge)  |

| Test #4   | Preconditions: Test 1 has passed  | The report would be generated explain how no calls exist | No calls exist in the call logs. |
|---|---|--|----------------------------------|
| testID: testGenerate ReportWithIn validCalls  Strategy: Exception/un expected input - trying to generate report without calls being loaded. | Steps:  1. See "Type anything to continue, type stop to end application"  2. Type anything  3. See "People file?"  4. Type "input/people.csv  5. See "Call file?"  6. Type     "input/emptyCalls.csv"  7. See "See people? [y/n]"  8. Type "n"  9. See"Generate report?     [y/n]"  10. Type "y"  11. Check results  12. Type "stop | No calls exist in the call logs.                         |                                  |

| Test #5  testID:  testLoadWar rantOutsideH ops  Strategy:  (Boundary value analysis - examining the results of getPeopleCo veredByWarr ant.java with | <ul> <li>surveillanceManagerUI.j ava has been loaded successfully</li> <li>people.txt</li> <li>call.txt exists</li> <li>Steps: <ol> <li>See "Type anything to continue, type stop to end application"</li> <li>Type anything</li> <li>See "People file?"</li> <li>Type "input/people.csv</li> <li>See "Call file?"</li> <li>Type "input/calls.csv"</li> <li>See "See people? [y/n]"</li> <li>Type "n"</li> </ol> </li> </ul> | Phone numbers covered by a 4-hop warrant originating from 358-721-0140950 (Tereasa Kuphal) [  1-hop: 663-879-6377778 (Rudolph Buckridge)  1-hop: 541-777-4740981 (Brett Mueller)  2-hop: 442-000-9865092 (Albertina Braun)  2-hop: 134-530-7421728 (Roseanna Herman)  2-hop: 903-282-4112077 (Tomas Nguyen) | Phone numbers covered by a 4-hop warrant originating from 358-721-0140950 (Tereasa Kuphal) [ 1-hop: 663-879-6377778 (Rudolph Buckridge) 1-hop: 541-777-4740981 (Brett Mueller) 2-hop: 442-000-9865092 (Albertina Braun) 2-hop: 134-530-7421728 (Roseanna Herman) 2-hop: 903-282-4112077 (Tomas Nguyen) 3-hop: 289-378-3996038 (Daniel Walker) 4-hop: 881-633-0099232 (Enoch Quitzon) ] |
|--|--|---|--|

| extreme<br>hops) | 9. See"Generate report? [y/n]" 10. Type "n" 11. See "Generate warrant? [y/n]" 12. Type "y" 13. See "hops" 14. Type "100" 15. See "number 16. Type "358-721-0140950" 17. Check result 18. Type "stop" | 3-hop: 289-378-3996038<br>(Daniel Walker)<br>4-hop: 881-633-0099232<br>(Enoch Quitzon) |  |
|------------------|--|--|--|
|                  | 16. Type Stop  |  |  |

|                              |   |   | • |
|------------------------------|---|---|---|
| Test #5                      | Preconditions: Test 1 and Test 2 passed | The system will provide a warrant with 2 hops for 358-721-0140950 (Teresa Kuphal) |   |
| testib.<br>testGetWarra      |   | Phone numbers covered by a  |   |
| nt                           |   | 2-hop warrant originating from  |   |
|                              | Steps:                                  | 358-721-0140950 (Tereasa  |   |
|                              | 1. Click "Get Warrant"                  | Kuphal) [   |   |
| Strategy:                    | 2. Enter the phone                      |   |   |
|                              | number                                  | 1-hop: 663-879-6377778  |   |
| Functional                   | "358-721-0140950"                       | (Rudolph Buckridge)   |   |
| testing -                    | 3. Enter the hops "2"                   | 4 5 7 544 777 4740004   |   |
| Testing the                  | 4. Click "Generate"                     | 1-hop: 541-777-4740981  |   |
| getWarrant.j<br>ava function | 5. Check results                        | (Brett Mueller)   |   |
| ava ranction                 |   | 2-hop: 442-000-9865092  |   |
|                              |   | (Albertina Braun)   |   |
|                              |   |   |   |
|                              |   | 2-hop: 134-530-7421728  |   |
|                              |   | (Roseanna Herman)   |   |
|                              |   | 2-hop: 903-282-4112077  |   |
|                              |   | (Tomas Nguyen)  |   |
|                              |   | 1   |   |
|                              |   | 1   |   |
|                              |   |   |   |
|                              |   |   |   |
|                              |   |   |   |
|                              |   |   |   |
|                              |   |   |   |