WSA Surveillance Manager Design Proposal

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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
 - o 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:

For my system test cases, I will use the following test file named *people.txt*:

```
PHONE_NUMBER, FIRST_NAME, LAST_NAME

890-478-7411718, Sara, Sanders

365-271-1141940, Devin, Shah

589-789-6344448, Riley, Brady

734-883-2367905, Maria, Hart
```

(test data continued)

And calls.txt:

```
CALL_ID, TIMESTAMP, CALL_LENGTH, PHONE_NUMBERS

ZFIU9080, Sat May 13 12:54:02 EDT 2017, 24, 365-271-1141940 | 734-883-2367905

KTFW7634, Mon Jun 10 11:12:49 EDT 2024, 39, 734-883-2367905 | 589-789-6344448

AAPF9192, Mon Dec 16 15:09:24 EDT 2019, 22, 365-271-1141940 | 589-789-6344448

CNAN3456, Mon Sep 22 06:03:01 EDT 2014, 2, 589-789-6344448 | 890-478-7411718 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-1141940 | 365-271-
```

Test ID	Description	Expected Results	Actual Results
Test #1 testID: testCallsForEach Person Strategy: Equivalence class: valid report of all calls	Preconditions: SurveillanceMan agerUI has been loaded successfully. The files people.txt and calls.txt Steps: 1. Click "View Calls for Each Person"	The interface loads. The system displays a list of all the names and phone numbers in ascending order based on the person's phone number. For each person, the system displays the person's calls in ascending chronological order. Calls involving 365-271-1141940 (Devin Shah) [5/13/2017 at 12:54:02 PM involving 1 other number(s): 734-883-2367905 (Maria Hart) 12/16/2019 at 15:09:24 PM involving 1 other number(s): 589-789-6344448 (Riley Brady) 04/29/2020 at 19:26:51 PM involving 2 other number(s): 734-883-2367905 (Maria Hart) 890-478-7411718 (Sara Sanders) Calls involving 589-789-6344448 (Riley Brady) [9/22/2014 at 06:03:01 AM involving 1 other number(s): 890-478-7411718 (Sara Sanders) 12/16/2019 at 15:09:24 PM involving 1 other number(s): 365-271-1141940 (Devin Shah) 06/10/2024 at 11:12:49 AM involving 1 other number(s): 734-883-2367905 (Maria Hart) Calls involving 734-883-2367905 (Maria Hart) [5/13/2017 at 12:54:02 PM involving 2 other number(s): 365-271-1141940 (Devin Shah) 04/29/2020 at 19:26:51 PM involving 2 other number(s): 365-271-1141940 (Devin Shah) 890-478-7411718 (Sara Sanders) 06/10/2024 at 11:12:49 AM involving 1 other number(s): 589-789-6344448 (Riley Brady) Calls involving 890-478-7411718 (Sara Sanders) [9/22/2014 at 06:03:01 AM involving 1 other number(s): 589-789-6344448 (Riley Brady) Calls involving 890-478-7411718 (Sara Sanders) [9/22/2014 at 06:03:01 AM involving 1 other number(s): 589-789-6344448 (Riley Brady) O4/29/2020 at 19:26:51 PM involving 2 other number(s): 365-271-1141940 (Devin Shah) 734-883-2367905 (Maria Hart)	The interface loads. The system displays a list of all the names and phone numbers in ascending order based on the person's phone number. For each person, the system displays the person's calls in ascending chronological order. Calls involving 365-271-1141940 (Devin Shah) [5/13/2017 at 12:54:02 PM involving 1 other number(s): 734-883-2367905 (Maria Hart) 12/16/2019 at 15:09:24 PM involving 1 other number(s): 589-789-6344448 (Riley Brady) 4/29/2020 at 19:26:51 PM involving 2 other number(s): 734-883-2367905 (Maria Hart) 890-478-7411718 (Sara Sanders) Calls involving 589-789-6344448 (Riley Brady) [9/22/2014 at 6:03:01 AM involving 1 other number(s): 890-478-7411718 (Sara Sanders) 12/16/2019 at 15:09:24 PM involving 1 other number(s): 365-271-1141940 (Devin Shah) 6/10/2024 at 11:12:49 AM involving 1 other number(s): 734-883-2367905 (Maria Hart) Calls involving 734-883-2367905 (Maria Hart) [5/13/2017 at 12:54:02 PM involving 1 other number(s): 365-271-1141940 (Devin Shah) 890-478-7411718 (Sara Sanders) 6/10/2024 at 11:12:49 AM involving 2 other number(s): 365-271-1141940 (Devin Shah) 890-478-7411718 (Sara Sanders) [9/22/2014 at 6:03:01 AM involving 1 other number(s): 589-789-6344448 (Riley Brady) Calls involving 890-478-7411718 (Sara Sanders) [9/22/2014 at 6:03:01 AM involving 1 other number(s): 589-789-6344448 (Riley Brady) Calls involving 890-478-7411718 (Sara Sanders) [9/22/2014 at 6:03:01 AM involving 2 other number(s): 589-789-6344448 (Riley Brady) Algebra displays a series of the number (s): 589-789-6344448 (Riley Brady) Algebra displays a series of the number (s): 589-789-6344448 (Riley Brady) Algebra displays a series of the number (s): 589-789-6344448 (Riley Brady) Algebra displays a series of the number (s): 589-789-6344448 (Riley Brady) Algebra displays a series of the number (s): 589-789-6344448 (Riley Brady) Algebra displays a series of the number (s): 589-789-6344448 (Riley Brady) Algebra displays a series of the number (s): 589-789-6344448 (Riley Brady)

Test #2

testID:testViewPe opleCoveredByW arrant

Strategy:

Equivalence class: valid number of hops and number

Preconditions:

- SurveillanceMan agerUI has been loaded successfully.
- The files people.txt and calls.txt

Steps:

- 2. Click "View People Covered by Warrant"
- 3. User inputs for phone number: "890-478-7400 718"
- 4. User inputs for hops: "2"
- 5. User presses enter

The interface loads. The system displays the report for the number and the number of hops with 3 indentation.

```
Phone numbers covered by a 2-hop warrant originating from 890-478-7411718 (Sara Sanders) [
1-hop:589-789-6344448 (Riley Brady)
1-hop:734-883-2367905 (Maria Hart)
```

1-hop:365-271-1141940 (Devin Shah)

The interface loads. The system displays the report for the number and the number of hops with 3 indentation.

Phone numbers covered by a 2-hop warrant originating from 890-478-7411718 (Sara Sanders) [

```
1-hop: 589-789-6344448 (Riley Brady)
1-hop: 734-883-2367905 (Maria Hart)
1-hop: 365-271-1141940 (Devin Shah)
```

Test #3 testID: testInvalidPhoneN umber Strategy:Exceptio n/Unexpected Input with wrong number	Preconditions: SurveillanceMan agerUl has been loaded successfully. The files people.txt and calls.txt Steps: 6. Click "View People Covered by Warrant" 7. User inputs for phone number: "890-478-7411 718" 8. User inputs for hops: "2" 9. User presses enter	The interface loads and there is a popup window that states a message: "Phone number [890-478-7411718] does not exist."	The interface loads and there is a popup window that states a message: "Phone number [890-478-7411718] does not exist."

Test #4

testID: testEdgeCaseNu mberHops

Strategy:

Boundary Value with number of hops

Preconditions:

- SurveillanceMan agerUI has been loaded successfully.
- The files people.txt and calls.txt

Steps:

- 10. Click "View People Covered by Warrant"
- 11. User inputs for phone number: "890-478-7400 718"
- 12. User inputs for hops: "1"
- 13. User presses enter

The interface loads. The system displays the report for the number and the number of hops with 3 indentation.

```
Phone numbers covered by a 1-hop warrant originating from 890-478-7411718 (Sara Sanders) [
    1-hop:589-789-6344448 (Riley Brady)
    1-hop:734-883-2367905 (Maria Hart)
    1-hop:365-271-1141940 (Devin Shah)
```

The interface loads. The system displays the report for the number and the number of hops with 3 indentation.

```
Phone numbers covered by a

1-hop warrant originating from

890-478-7411718 (Sara Sanders)

[
    1-hop:589-789-6344448
(Riley Brady)
    1-hop:734-883-2367905
(Maria Hart)
    1-hop:365-271-1141940
(Devin Shah)
]
```

Test #5 testID: testWrongNumber Hops Strategy: Exception/Unexpe cted Input with wrong number of	Preconditions: SurveillanceMan agerUI has been loaded successfully. The files people.txt and calls.txt Steps:	The interface loads and there is a popup window that states a message: "Number of hops must be greater than 0."	The interface loads and there is a popup window that states a message: "Number of hops must be greater than 0."
- I	14. Click "View People Covered by Warrant" 15. User inputs for phone number: "890-478-7400 718" 16. User inputs for hops: "-1" 17. User presses enter		