BLACK BOX TEST PLAN

To run software from eclipse, right-click the project folder, and select **run as… > java application.**

It is preferable that the tests be run sequentially. Please make sure that the files listed below the test plan table exist and contain the provided data.

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| **invalidFile (DT- trying to use file that doesn’t exist.)** | **Preconditions**:   * SecurityMangerUI has been loaded * the file “nonexistent.txt” does not exist.   Steps:   * choose “load attack tree from files * when prompted for a preorder traversal file, type“nonexistent.txt” and press enter. | User is re-prompted: **“File doesn’t exist. Please choose a new file:”** |  |
| **attackTreeB uild**  **(ECP-**  **building an attack tree with “sample-pre order.txt” and**  **“sample-post order.txt”** | **Preconditions:**   * Test 1 passed * The files   “sample-preorder.txt” and “sample-postorder.txt” exist.  **Steps:**   * Choose the option to load an attack tree file * type “sample-preorder.txt” and press enter. * when prompted for a postorder traversal file, type “sample-postorder.txt” and press enter. | Program outputs goal root info:  **GOAL [Description0, C=62062.5, P=0.56, I=10.0]** |  |
| **levelOrderTr aversal**  **(ECP - print a level-order traversal of** | **Preconditions:**   * Test 2 has passed.   **Steps:**   * User selects the option “print level-order traversal” | Program outputs: **GOAL Description0 O 0.53 4 33000**  **Description1**  **A .559 10 30799** |  |

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| **the attack tree)** | * When prompted for which tree to print the traversal of, choose “Log File Tree” | **Description2**  **O .01449 9.352 177000**  **Description3** |  |
| **O .01419 10 344000** |
| **Description9** |
| **O .01576 9.983 420000** |
| **Description16** |
| **O 0.47 5 55000** |
| **Description24** |
| **O 0.13 2 2000** |
| **Description25** |
| **A 0.17 2 59000** |
| **Description4** |
| **A 0.38 9 4000** |
| **Description5** |
| **A 0.77 1 32000** |
| **Description6** |
| **A 0.94 0 41000** |
| **Description7** |
| **A 0.31 1 41000** |
| **Description8** |
| **A 0.95 0 61000** |
| **Description10** |
| **A 0.26 5 68000** |
| **Description11** |
| **A 0.94 4 56000** |
| **Description12** |
| **A 0.65 10 27000** |
| **Description13** |
| **A 0.47 8 71000** |
| **Description14** |
| **A 0.2 1 61000** |
| **Description15** |
| **A 0.73 1 64000** |
| **Description17** |
| **A 0.24 4 20000** |
| **Description18** |
| **A 0.26 2 6000** |
| **Description19** |
| **A 0.89 9 97000** |
| **Description20** |
| **A 0.82 5 90000** |
| **Description21** |
| **A 0.6 8 49000** |
| **Description22** |
| **A 0.79 6 94000** |
| **Description23** |

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| **retrieveLogE ntries (BV - look up a date on the boundary)** | **Preconditions:**   * LogFile.txt has be loaded and tree has been constructed   **Steps**:   * User is prompted for what to do and enters “Retrieve log entries * User then is prompted for date and user enters   “02-15-2017” | Program outputs:  **02-01-2017 12:15:05,**  **jtking2, view records** |  |
| **retrieveLogE ntries (DT - look up a log that does not exist** | **Preconditions:**   * LogFile.txt has be loaded and tree has been constructed   **Steps**:   * User is prompted for what to do and enters “Retrieve log entries * User then is prompted for date and user enters   “02-15-2016” | Program outputs”  **“Log not found”** and reprompts the user. |  |
| **exitProgram (ECP - exits the program)** | **Preconditions:**   * Program is running   **Steps**:   * User chooses the option to exit the program | **Program exits** |  |

**Test Files**

# sample-preorder.txt

GOAL Description0

O 0.53 4 33000 Description1 A Description2

O Description3

A 0.17 2 59000 Description4

A 0.38 9 4000 Description5

A 0.77 1 32000 Description6

A 0.94 0 41000 Description7

A 0.31 1 41000 Description8 O Description9

A 0.95 0 61000 Description10

A 0.26 5 68000 Description11

A 0.94 4 56000 Description12

A 0.65 10 27000 Description13

A 0.47 8 71000 Description14

A 0.2 1 61000 Description15 O Description16

A 0.73 1 64000 Description17

A 0.24 4 20000 Description18

A 0.26 2 6000 Description19

A 0.89 9 97000 Description20

A 0.82 5 90000 Description21

A 0.6 8 49000 Description22

A 0.79 6 94000 Description23

O 0.47 5 55000 Description24

O 0.13 2 2000 Description25

# sample-postorder.txt

O 0.53 4 33000.0 Description1

A 0.17 2 59000.0 Description4

A 0.38 9 4000.0 Description5

A 0.77 1 32000.0 Description6

A 0.94 0 41000.0 Description7

A 0.31 1 41000.0 Description8 O Description3

A 0.95 0 61000.0 Description10

A 0.26 5 68000.0 Description11

A 0.94 4 56000.0 Description12

A 0.65 10 27000.0 Description13

A 0.47 8 71000.0 Description14

A 0.2 1 61000.0 Description15 O Description9

A 0.73 1 64000.0 Description17

A 0.24 4 20000.0 Description18

A 0.26 2 6000.0 Description19

A 0.89 9 97000.0 Description20

A 0.82 5 90000.0 Description21

A 0.6 8 49000.0 Description22

A 0.79 6 94000.0 Description23 O Description16

O 0.47 5 55000.0 Description24

O 0.13 2 2000.0 Description25 A Description2

GOAL Description0

LogFile.txt

02-12-2017 12:15:05, jtking1, view records

02-01-2017 12:15:05, jtking2, view records

02-15-2017 12:15:05, jtking3, view records