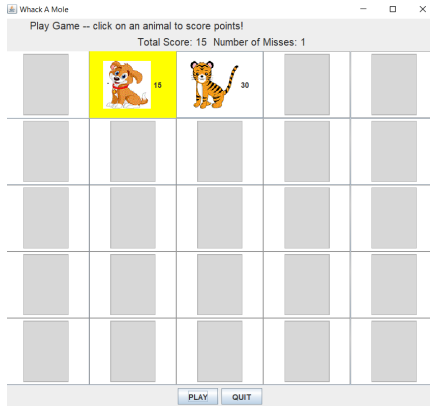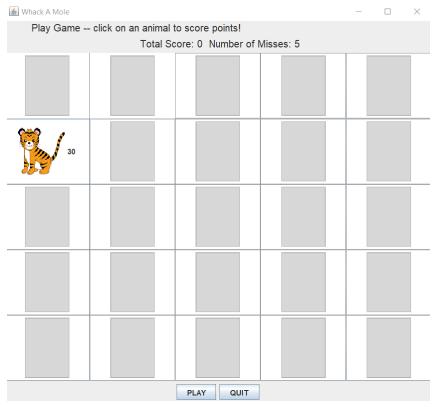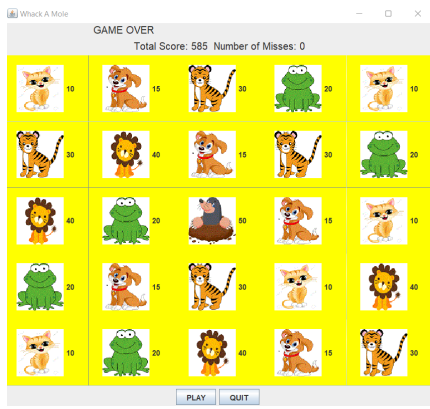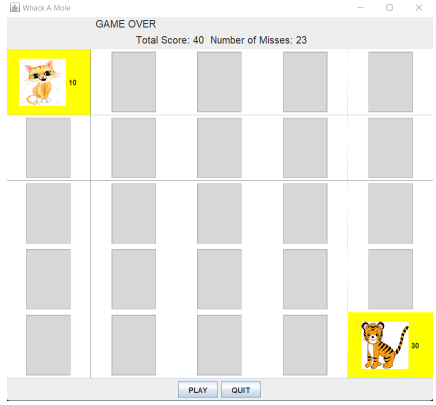# System Test Plan: WhackaMole program

**Introduction:** Each test case below assumes that the images directory contains the symbol image files. The text in bold in the **Description** column represents the test inputs to the program.  In test mode, once input is complete, clicking on the STOP button will halt the program at that point so the actual results can easily be recorded.  Either a written description of the GUI display or a screen shot (using Insert -> Image) is acceptable for actual results.

| Test ID | Description | Expected Results | Actual Results |
|---|---|---|---|
| testInitialGUI<br><br>Author: Dr. Balik | $ java -cp bin WhackaMoleGUI -t | GUI entitled "Whack A Mole" is  displayed with 5 rows and 5 cols of symbols(animals), PLAY and QUIT buttons.<br><br>Welcome to the Whack a Mole Game -- Press PLAY to start a new game!<br><br>Total Score: 0  Number of Misses: 0<br><br>The symbols displayed in order worth (points) are:<br>cat(10),dog(15),tiger(30),frog(20), cat(10) tiger(30),lion(40),dog(15),tiger(30),frog(20), lion (40),frog(20),mole(50),dog(15),cat(10), frog (20),dog(15),tiger(30),cat(10),lion(40), cat (10),frog(20),lion(40),dog(15),tiger(30) |  |

| testPlayGame<br><br>Author: Dr. Balik | $ java -cp bin WhackaMoleGUI -t<br><br>**Click on PLAY button**<br>**Click on each animal in row 0 when they are displayed**.<br>When the symbol in row 1, col 1 (tiger) is displayed, **click on the STOP button** to halt the game. | GUI displays:<br><br>Play Game -- click on an animal to score points!<br><br>Total Score: 85  Number of Misses: 0<br><br>Symbols in row 0 from left to right (cat, dog, tiger, frog, cat) with yellow highlighted background followed by symbol in row 1, col 0 (tiger) with white background. |  |
|---|---|---|---|
| testQuit<br><br>Author: Dr. Balik | $ java -cp bin WhackaMoleGUI -t<br><br>**Click on QUIT button** | GUI closes | GUI closes |

| testClickOnSymbol<br><br>Author: Dr. Balik | $ java -cp bin WhackaMoleGUI -t<br><br>**Click on PLAY button**<br>**Do not click on the symbol displayed in row 0 col 0 (cat).**<br>**Click on the symbol displayed in row 0, col 1 (dog)** when it appears.<br>When the symbol in row 0 col 2 (tiger) is displayed, **click on the STOP button** to halt the game. | GUI displays:<br><br>Play Game -- click on an animal to score points!<br><br>Total Score: 15  Number of Misses: 1<br><br>Symbol in row 0, col 1 (dog) is displayed with yellow highlighted background followed by symbol in row 0 col 2 (tiger) with a white background. |  |
| --- | --- | --- | --- |
| testClickOn0SymbolsFirstRow<br><br>Author:        William Baldwin | $ java -cp bin WhackaMoleGUI -t<br><br>**Click on PLAY button**<br>**Do not click on any symbols**<br>**When the first symbol of the second row (row 1 col 0) tiger appears click on the STOP button to halt the game** | GUI displays:<br><br>Play Game -- click on an animal to score points!<br><br>Total Score: 0  Number of Misses: 5<br><br>All symbols in row 0 are hidden with white background and tiger is shown in row 1 col 0 with white background |  |

| testGameOverAllMisses

Author:       William Baldwin | $ java -cp bin WhackaMoleGUI -t

**Click on PLAY button
Do not click on any symbols for the entire game.** | GUI displays:

GAME OVER

Total Score: 0 Number of Misses: 5

Entire grid is empty of animal symbols all boxes should be blank with original gray card and white background |  |
|---|---|---|---|
| testGameOverClickOn AllSymbols

Author:       William Baldwin | $ java -cp bin WhackaMoleGUI -t

Click on PLAY button
Click on every symbol as it pops up from row 0 to col 4 repeat for rows 1-4 | GUI displays:

GAME OVER

Total Score: 585 Number of Misses: 0

Entire grid is full of animal symbols all highlighted yellow.
Row 0 from left to right is cat 10, dog 15, tiger 30, frog 20, cat 10
Row 1 from left to right is tiger 30, lion 40, dog 15, tiger 30, frog 20
Row 2 from left to right is lion 40, frog 20, mole 50, dog 15, cat 10
Row 3 from left to right is frog 20, dog 15, tiger 30, cat 10, lion 40 |  |

| | | Row 4 from left to right is cat 10, frog 20, lion 40, dog 15, tiger 30 | |
|---|---|---|---|
| testClickOnFirstandLastSymbol (boundary values)<br><br>Author: William Baldwin | $ java -cp bin WhackaMoleGUI -t<br><br>Click on PLAY button<br>**When the first symbol of first row cat appears (row 0 col 0) click on it. Let the rest of the symbols appear and DO NOT click on any of them until the last symbol of the last row (row 4 col 4) tiger appears click on it. Then wait for GAME OVER** | GUI displays:<br><br>GAME OVER<br><br>Total Score: 40 Number of Misses: 23<br><br>Cat is shown in row 0 col 0 with yellow background<br>Tiger is shown in row 4 col 4 with yellow background<br>All other symbols are hidden |  |
| testClickOnMole<br><br>Author: William Baldwin | $ java -cp bin WhackaMoleGUI -t<br><br>**Click on PLAY button**<br>**Do not click on any symbols displayed in row 0 or row 1. Do not click on symbols in row 2 col 0 or row 2 col 1. Click on the symbol in row 2 col 2 (the mole).** When the symbol in row 2 col 3 (dog) is displayed, **click on the STOP button** to halt the game. | GUI displays:<br><br>Play Game -- click on an animal to score points!<br><br>Total Score: 50  Number of Misses: 12<br><br>All symbols in row 0 and 1 are hidden<br>Row 2 col 0 symbol is hidden<br>Row 2 col 1 symbol is hidden<br>Symbol in row 2, col 2 (mole) is displayed with yellow highlighted background followed by symbol in row 2 col 3 (dog) with a white background. |  |