# 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) | 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),<br>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. | 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 | $ java -cp bin WhackaMoleGUI -t | GUI displays: | GUI displays: |

| | | | |
|---|---|---|---|
| Author: Dr. Balik | **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. | 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. | 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. |
| testClickOnAllButFirstAndLastSymbolsTestMode<br><br>Author: Benjamin Uy | $ 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><br>Afterwards, **click on all symbols that appear in order** but **do not click the symbol displayed in row 4 col 4 (tiger)**.<br><br>Once row 0 col 0 (cat) is displayed again, **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: 545 Number of Misses: 2<br><br>Symbol in row 0, col 0 (cat) is displayed with a white background. Symbol in row 4 col 4 (tiger) has an empty gray background. The rest of the symbols are in yellow backgrounds. | GUI displays:<br><br>Play Game – click on an animal to score points!<br><br>Total Score: 545 Number of Misses: 2<br><br>Symbol in row 0, col 0 (cat) is displayed with a white background. Symbol in row 4 col 4 (tiger) has an empty grey background. The rest of the symbols are in yellow backgrounds. |

| testClickOnAllButOneSymbolNonTestMode

Author: Benjamin Uy | $ java -cp bin WhackaMoleGUI

**Click on PLAY button**
**Click on all symbols that appear in order (will vary)**

**Keep clicking on the symbols until one symbol remains unclicked (this symbol will vary).**

Once there is one symbol remaining unclicked, **do not click that symbol until the game ends)** | GUI displays:

GAME OVER

Total Score: (varies)  Number of Misses: (varies, but is at least one)

The animals/symbols that are shown will be randomized between games, so the display is not expected to have a specific order. However, with one symbol remaining, all of the other symbols that were clicked have yellow backgrounds whereas the one unclicked symbol has a transparent gray box. | GUI displays:

GAME OVER

Total Score: (varies)  Number of Misses: (varies, but is at least one)

The animals/symbols that are shown will be randomized between games, so the display is not expected to have a specific order. However, with one symbol remaining, all of the other symbols that were clicked have yellow backgrounds whereas the one unclicked symbol has a transparent gray box |
|---|---|---|---|
| testClickOnNoSymbolsNonTestMode

Author: Benjamin Uy | $ java -cp bin WhackaMoleGUI

**Click on PLAY button**
**Do not click on any symbols that appear and let the game end automatically.** | GUI displays:

GAME OVER

Total Score: 0 Number of Misses: (varies, but is at least one)

The animals/symbols that are shown will be randomized between games, so the display is not expected to have a specific order. However, the last symbol that appeared (was previously in white background) will | GUI displays:

GAME OVER

Total Score: 0 Number of Misses: (varies, but is at least one)

The animals/symbols that are shown will be randomized between games, so the display is not expected to have a specific order. However, the last symbol that |

| | | | |
|---|---|---|---|
| | | now have a transparent gray box over it. The remaining symbols will have empty gray backgrounds. | appeared (was previously in white background) will now have a transparent gray box over it. The remaining symbols will have empty gray backgrounds. |
| testClickOnAllSymbols NonTestMode<br><br>Author: Benjamin Uy | $ java -cp bin WhackaMoleGUI<br><br>**Click on PLAY Button**<br><br>**Click on all symbols that appear in order until the game ends (be quick not to miss any)** | GUI displays:<br><br>GAME OVER<br><br>Total Score: 585 Number of Misses: 0<br><br>All animals/symbols are displayed in yellow backgrounds. | GUI displays:<br><br>GAME OVER<br><br>Total Score: 585 Number of Misses: 0<br><br>All animals/symbols are displayed in yellow backgrounds. |
| test ClickOnNoSymbolsTest Mode<br><br>Author: Benjamin Uy | $ java -cp bin WhackaMoleGUI -t<br><br>**Click on PLAY button**<br><br>**Do not click any of the symbols in row 0 (cols 0 to 4, inclusive)**<br><br>Once the next symbol in the next row is displayed, **click on the STOP button to halt the game.** | GUI displays:<br><br>Total Score: 0 Number of Misses: 5<br><br>Symbols in row 0 from left to right (cat, dog, tiger, frog, cat) have no background followed by symbol in row 1, col 0 (tiger) with white background. | GUI displays:<br><br>Total Score: 0 Number of Misses: 5<br><br>Symbols in row 0 from left to right (cat, dog, tiger, frog, cat) have no background followed by symbol in row 1, col 0 (tiger) with white background. |