**Testing Console Output.**

/\* how to test console output \*/

/\* [http://paulgestwicki.blogspot.ie/2011/03/unit-testing-javas-systemout-output.html \*/](http://paulgestwicki.blogspot.ie/2011/03/unit-testing-javas-systemout-output.html%20*/)

Add the following method to the Robot Class

**public void** sendAgeMsg() **throws** IllegalArgumentException {  
 **try** {  
 **if** (**age** > 25) {  
 **throw new** IllegalArgumentException(**"Age too old"**);  
 }  
  
 } **catch** (IllegalArgumentException e) {  
 System.***out***.println(**"Error "** + e.getMessage());  
 }  
 System.***out***.println( **"Age ok"**);  
}

Create a new test class for the Robot class and call it RobotScreenOutputTest. You can copy the code below to the new test class.

**import** org.junit.After;  
**import** org.junit.Before;  
**import** org.junit.Test;  
  
**import** java.io.ByteArrayOutputStream;  
**import** java.io.IOException;  
**import** java.io.PrintStream;  
**import static** org.junit.Assert.\*;  
**public class** RobotScreenOutputTest {  
  
 **private final** ByteArrayOutputStream **outContent** = **new** ByteArrayOutputStream();  
 **private final** ByteArrayOutputStream **errContent** = **new** ByteArrayOutputStream();  
  
 @Before  
 */\* for console output testing \*/* **public void** setUpStreams() {  
 System.setOut(**new** PrintStream(**outContent**));  
 System.*setErr*(**new** PrintStream(**errContent**));  
 }  
  
  
 @Test  
 **public void** testageOkMsg() **throws** IOException  
 {  
 ByteArrayOutputStream baos = **new** ByteArrayOutputStream();  
 System.setOut(**new** PrintStream(baos));  
 Robot buddy = **new** Robot(**"buddy"**, 15);  
 buddy.sendAgeMsg();  
 baos.flush();  
 String whatWasPrinted = **new** String(baos.toByteArray());  
 String[] linesOfOutput = whatWasPrinted.split(*//* System.*getProperty*(**"line.separator"**));  
 *assertEquals*(**"Age ok"**, linesOfOutput[0]);  
 }  
  
  
 @Test  
 **public void** testageNotOkMsg() **throws** IOException  
 {  
 ByteArrayOutputStream baos = **new** ByteArrayOutputStream();  
 System.setOut(**new** PrintStream(baos));  
 Robot buddy = **new** Robot(**"buddy"**, 27);  
 buddy.sendAgeMsg();  
 baos.flush();  
 String whatWasPrinted = **new** String(baos.toByteArray());  
 String[] linesOfOutput = whatWasPrinted.split(*//* System.*getProperty*(**"line.separator"**));  
 *assertEquals*(**"Error Age too old"**, linesOfOutput[0]);  
 }  
  
  
 @After  
 */\* for console output testing \*/* **public void** cleanUpStreams() {  
 System.setOut(**null**);  
 System.*setErr*(**null**);  
 }  
  
}