Table of Contents

Bug 1: Incorrect Payout on win

Following is the screenshot of the output of the junit test for the payout test. So to carry out his test, I created a player "Fred" with starting balance 100 and bet 5 on "CROWN".
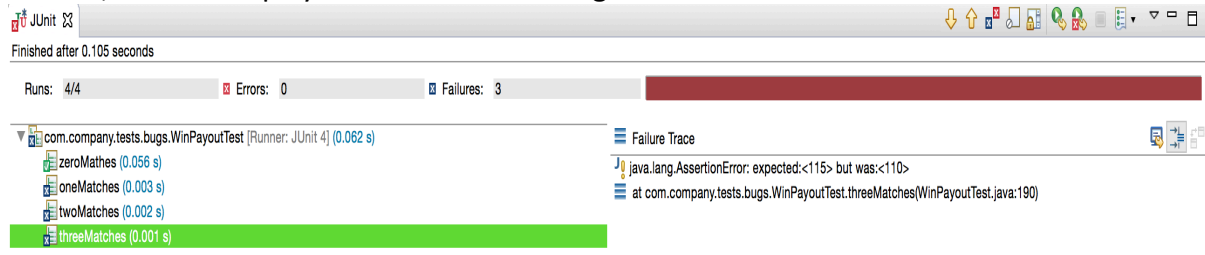

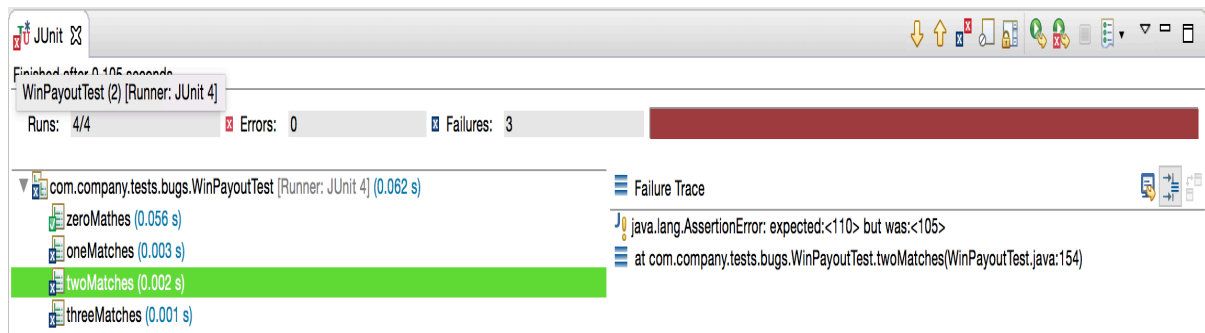Fig: screenshot showing the failure on one match

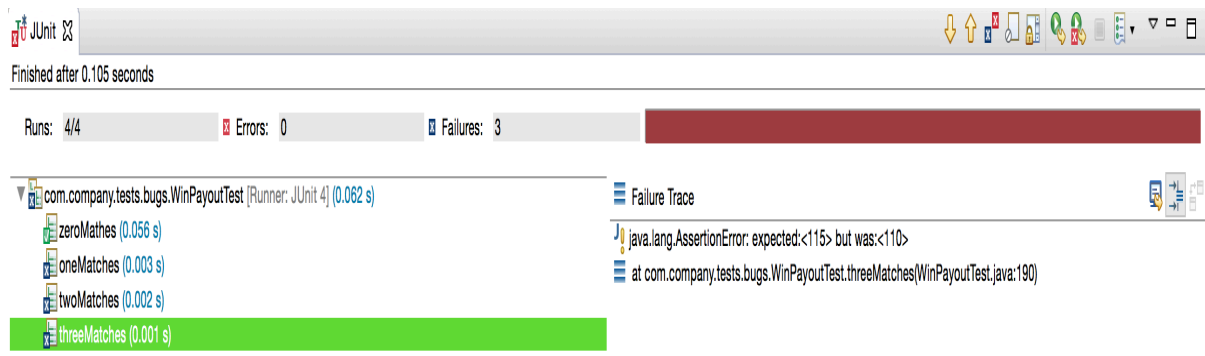Fig : screenshot showing the failure on two matches

Fig : screenshot showing the failure on two matches

The above screenshot shows there is a failure on one match, two match and three match while one match passes because we have only bug on returning the bet which is only done whilst wining.

BUG 2: Player cannot reach betting limit

This junit test tests the ending balance of the player. As per the rule of the game the game ends only when the balance of the player is less than the bet balance which is 5. Even if the balance of the player is equivalent to the bet balance then game shouldn't end.
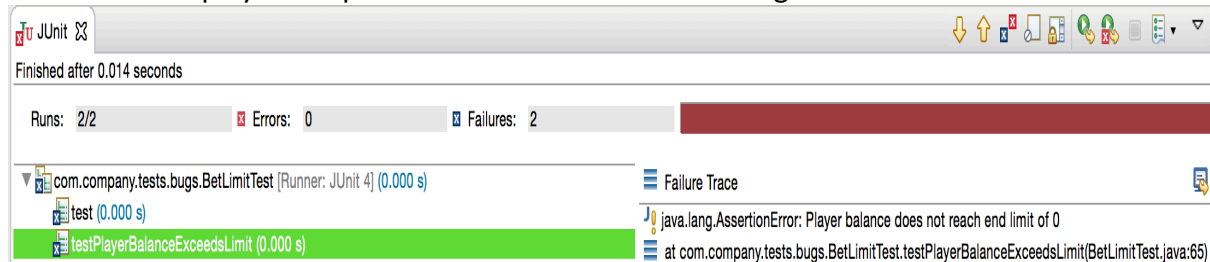
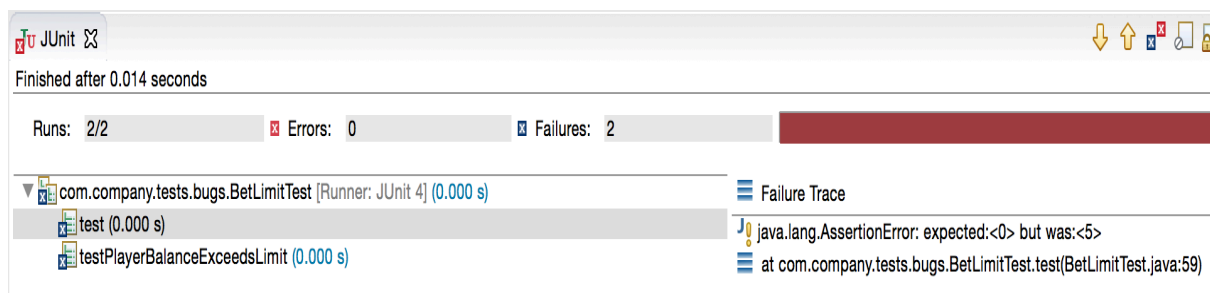Fig: screenshot confirming the balance isn't 0

Fig: screenshot showing the failure of the test.

In the above screenshot we can see that the expected result was 0 but the actual result was 5. This is why the unit test has failed.

Bug 3: Game overall odds

This test tests the fact if the win ratio is approx. 0.42. As per the rule of the game the win ratio should only be in between 0.42 to 0.45. Following is the result of the test.
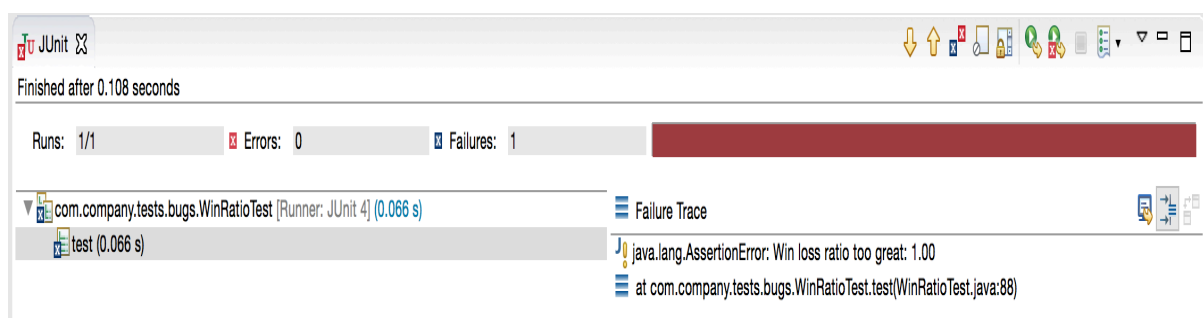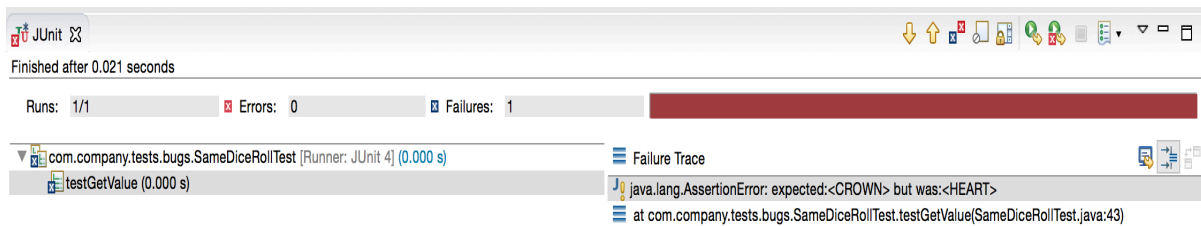
Fig: Screenshot showing the failure of the test.
Above screen shot shows the failure of the test. The failure trace shows the win loss ratio was too great than it was supposed to be. This is why the test has failed.

Bug 4: Dice seem to always roll the same after first roll.

JUnit
Finished after 0.021 seconds

Runs: 1/1   Errors: 0   Failures: 1

▼ com.company.tests.bugs.SameDiceRollTest [Runner: JUnit 4] (0.000 s)
   testGetValue (0.000 s)

Failure Trace
java.lang.AssertionError: expected:<CROWN> but was:<HEART>
at com.company.tests.bugs.SameDiceRollTest.testGetValue(SameDiceRollTest.java:43)

Bug 5: "SPADE" doesn't appear in roll.

This test tests for the bug that "Spade" doesn't occur in the values of the dice rolled. The program tests in such a way that if fails if the dice roll results doesn't contain "Spade".

JUnit
Finished after 0.167 seconds

Runs: 1/1   Errors: 0   Failures: 1

▼ com.company.tests.bugs.NoSpadeRollTest [Runner: JUnit 4] (0.123 s)
   testRollAllValues (0.123 s)

Failure Trace
java.lang.AssertionError: Results do not contain: SPADE
at com.company.tests.bugs.NoSpadeRollTest.testRollAllValues(NoSpadeRollTest.java:97)
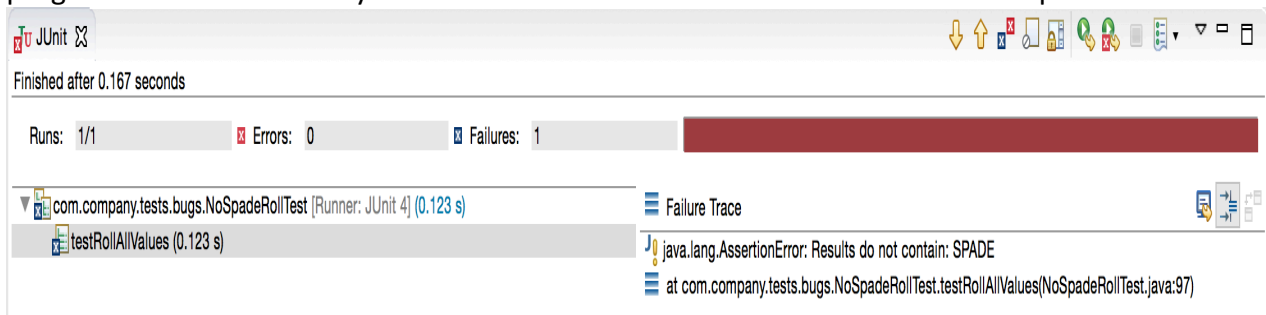
Fig: Screenshot showing the failure of the test.
The above screen shot shows that the test has failed, meaning that the dice roll values doesn't contain the "Spade". The "Failure Trace" section also shows the assertion error that "Result do not contain "Spade"".