| **Test Name** | | Game Odds Test |
| --- | --- | --- |
| **Use Case Tested:** | | Play Game |
| **Test Description:** | | This script covers the bug which occurs at the end of Playgame when reviewing the win loss ratio. Crown and Anchor games have an approximate 8% bias to the house. So the win : (win+lose) ratio should approximately equal 0.42. This does not appear to be the case. Win rates appear to be either ~40% or ~60%. |
| **Pre-conditions** | | * Registered user can only get chance to Playgame. The balance must be positive which is greater than the minimum bet. * 3 dice is in use for initializing the game . |
| **Post-conditions** | | * We expect that after 100 games played the overall win/loss ratio should approximate 42% with a small margin of error (~1%). * We expect to obtain consistent results after running the test 5 times. |
| **Testing requirement** | The overall outcome of the game should be 8 percent in favor of the house which is concerned by this test. 42 games should be won by the player out of every 100 i.e. 42 percent approximation should be overall win and loss ratio of the game. Margin of error reduces as the game played increases | |

### Script Steps

| **Step #** | **Test Action** | **Expected Results** | **Pass/ Fail** |
| --- | --- | --- | --- |
| 1 | Create player | Player exists with name “Sam”, balance 10, and limit 0 |  |
| 2 | Start new game | A new game exists |  |
| 3 | Play round with specified player, bet and pick | A win or loss and associated balance adjustment as per game rules |  |
| 4 | Repeat step 4 until gameplay ends | Games ends |  |
| 5 | Repeat steps 3-5 x number of games (100) |  |  |
| 6 | Check win rate | Win rate of 42% +/- 3% |  |
| 7 | Repeat steps 1 – 7 times fives and verify consistent result. |  |  |

**Test Execution**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date/Time | Tester | Test ID | Test Phase | Status |
| 14/10/2017 6:10pm | Rajani | Bug3.test1 | UAT | Fails |