|  |  |
| --- | --- |
| **Test Name** | Correct Payout Level |
| **Use Case Tested** | Correct Payout level |
| **Test Description** | The player should receive the correct payout depending on their bet amount and the amount of dice their symbol appears face up on. If the players chosen symbol appears on one die, they get their bet back, if the symbol occurs on the top face of two dice, the player gets double their bet back. If the chosen symbol appears on the top of all three die, the players gets tripled their bet back, and if the players chosen symbol doesn’t appear on the top face of any three dice, the player loses their bet. |
| **Pre-conditions** | * Player exists * Player places a bet within the betting range * Player has picked their dice face * Player has placed a bet |
| **Post-conditions** | * The winnings (if any) are paid back to the user depending on the amount of faces the symbol appears on. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| **Test step** | **Action done** | **Expected Test Results** | **Pass** | **Fail** |
| **1** | Player bets $5 on a selected symbol | The correct symbol has $5 placed on it | X |  |
| **2.1** | Symbol doesn’t appear on the top face of any dice | Player loses the $5 | X |  |
| **2.2** | Symbol appears on the top face of 1 die | Player gets $5 returned to them |  | X |
| **2.3** | Symbol appears on the top face of two dice | Player gets $10 returned to them | X |  |
| **2.4** | Symbol appears on the top face of three dice | Player gets $15 returned to them | X |  |

|  |  |
| --- | --- |
| **Test Name** | Player reaches betting limit |
| **Use Case Tested** | Player reaches betting limit |
| **Test Description** | Once the player bets the betting limit, they are disallowed to place any further bets |
| **Pre-conditions** | * Player exists * Player bets out of the accepted betting range |
| **Post-conditions** | * Player is denied to place their bet * The game finishes |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test step** | **Action done** | **Expected result** | **Pass** | **Fail** |
| **1** | Player choses their symbol | The symbol is selected | X |  |
| **2.1** | Player bets below the betting limit | The bet is denied  The game finishes |  | X |
| **2.2** | Player bets above the betting limit | The bet is denied  The game finishes |  | X |

|  |  |
| --- | --- |
| **Test Name** | Correct Gaming odds |
| **Use Case Tested** | Correct Gaming odds |
| **Test Description** | After a certain amount of rolls, the appearing die faces should occur at a certain percent. This is to make the game seem fair and not ‘rigged’ against the players favour. |
| **Pre-conditions** | * Game should have a sufficient amount of turns to have a big enough census of data to determine appearing percent of each face * Track the amount of appearing faces by recording them down after each roll |
| **Post-conditions** | * Die faces have 8% bias against the user (loss rate of 8% each round, only 42% of rolls return any money to players) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test step** | **Action Done** | **Expected Result** | **Pass** | **Fail** |
| **1** | Play game for 100 rolls |  | X |  |
| **2** | Review results after the game | The dice have a win ratio of 42% (8% bias against the user) |  | X |

|  |  |
| --- | --- |
| **Test Name** | Testing die faces |
| **Use case tested** | Different die faces |
| **Test Description** | Each die face should change per roll of the dice. That is, each face of the diamond should have roughly the same change of appearing than the other. |
| **Pre-conditions** | * Game should have sufficient turns to gather enough information of the average die roll * The appearing faces of each die should be recorded as they appear |
| **Post-conditions** | * Each die face should have random chances of appearing and all die faces should have around the same appearances as each other. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Step** | **Action Done** | **Expected Result** | **Pass** | **Fail** |
| **1** | Go through 100 turns of the program |  | X |  |
| **2** | Calculate the resulting die faces | Each die face appears around the same as every other die face |  | X |
| Each die occurs randomly |  | X |