

test plan

Final Version



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Fight The Landlord

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# **Introduction**

## **Purpose**

This test plan describes the testing approach and overall framework that will drive the testing of the multiple player games. The document introduces:

* Test Strategy: rules the test will be based on, including the givens of the project; description of the process to set up a valid test.

## **Project Overview**

Fight the Landlord (Dou Di Zhu) is a climbing game primarily for three players. In the game, one player, the “landlord”, plays alone and the others form a team. The landlord’s aim is to be the first to play out all his cards in valid combinations, and the ‘Farmer’ team wins if any one of them manages to play all their cards before the landlord. The game is very popular all over China and is also extensively played online.

# **Test Strategy**

## **Objectives**

The objective of the test is to ensure the project is in accordance with established requirements. Meanwhile, if something goes wrong the test plan can be used as a record. The final version of the project will be based on the test result.

## **Scope**

Testing will cover the functional testing of the project. The functionality of this release is detailed in the URS document. The installation will be tested on the different laptops.

## **Test Principle**

Testing will be focused on meeting the business objectives, cost efficiency, and quality.

There will be common, consistent procedures for all teams supporting testing activities.

Testing processes will be well defined, yet flexible, with the ability to change as needed.

Testing will be a repeatable, quantifiable, and measurable activity.

## **Test processes [1]**

1. Planning and control
2. Analysis and Design
3. Implementation and Execution
4. Evaluating exit criteria and Reporting
5. Test Closure activities

## **Client communication strategy**

1. Email (no restriction of time and place)
2. Phone (directly and in time)
3. Social media (effective and widespread)
4. Texting (immediate attention and good interact)

## **Functional Test**

Functional testing will be performed to check the functions of the application. The functional testing is carried out by feeding the input and validates the output from the application.

### **Register**

**Purpose:** Create accounts for the game

**Pre-condition:** User opens the game and does not have any account for the game.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Register | 1. Player click “Register” button before page redirect to the lobby. 2. User fills in the relevant information 3. User clicks on the register button. | The user’s info is correctly saved in the database. | Yes |

**Pre-condition:** User opens the game and does not have any account for the game.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Register | 1. Player click “Register” button before page redirect to the lobby. 2. User doesn’t fill in all relevant information 3. User clicks on the register button. | The system shows an error message to ask user to fill in all required info | Yes |

### **Login**

**Purpose:** Player login the game

**Pre-condition:** User has an account

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Login | 1. User clicks on the login button. 2. System redirects to the login window. 3. The user fills in the account information. 4. User clicks on login. | System redirects to lobby window | Yes |

**Pre-condition:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Login | 1. User clicks on the login button. 2. System redirects to the login window. 3. The user fills in wrong information. 4. User clicks on login. | The system shows an error message | Yes |

### **Log out**

**Purpose:** Player quit the game

**Pre-condition:** Player already logged in lobby window

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Log out | 1. Player clicks exit button | The system ends the application and back to the desktop. | Yes |

**Pre-condition:** Player already in game window

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Log out | 1. Player click exit button | System quit the game window and back to lobby window  System close game window and back to lobby window | No  But sometimes there are communication problems |

### **Determine the landlord**

**Purpose:** Determine which player become landlord

**Pre-condition:** The game just started

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Determine the landlord | 1. Player click “Call” or “Pass” button | System show “Scramble” and “Pass” optional button to each player in anticlockwise | Yes |

**Pre-condition:** The game just started

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Determine the landlord | 1. Player didn’t click any button in 20 seconds | System automatically regard as pass | Yes |

### **Select cards**

**Purpose:** The player can reselect cards he wants to play

**Pre-condition:** The game has started and it’s the turn of the player to hand over cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Select the desired cards | 1. The user clicks on the ideal cards. | The system highlights the selected cards | Yes |

**Pre-condition:** The game has started and it’s the turn of the player to hand over cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Select the desired cards | 1. The player doesn’t click on play within the 20 seconds | System automatically hands over the smallest card | Yes |

### **Hand over cards**

**Purpose:** Players hand over the selected cards

**Pre-condition:** System highlights the selected cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Hand over the selected cards | 1. Player clicks on play to hand over the selected cards | The system displays the cards in the middle of the table.  The system removes the cards from the user’s own cards.  System recalculates the total number of player’s cards and displays the number.  System recalculates the total score of the player and displays it. | Yes |

**Pre-condition:** System highlights the selected cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Hand over the selected cards | 1. The player doesn’t click on play within the 20 seconds | System automatically hands over the smallest card | Yes |

**Pre-condition:** System highlights the selected cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Hand over the selected cards | 1. Player clicks on play to hand over the selected cards which are illegal combination | System displays an error message to ask the player to reselect cards within the rest time | Yes |

**Pre-condition:** System highlights the selected cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Hand over the selected cards | 1. Player clicks on play to hand over the selected cards which are smaller than the previous player | System displays an error message to ask the player to reselect cards within the rest time | Yes |

**Pre-condition:** The player hasn’t selected cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Hand over the selected cards | 1. Player clicks on play | System displays an error message to ask the player to select cards within the rest time | Yes |

### **Give hints to player**

**Purpose:** A player is able to let the system to suggest him get which card(s) out

**Pre-condition:** It’s the turn for the player to hand over cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Give hints to player | 1. The player presses hint button. | The system highlights the first option of qualified cards which is just higher than previous player’s cards. | Yes |

**Pre-condition:** It’s the turn for the player to hand over cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Give hints to player | 1. The player presses hint button. | The system cannot find qualified cards.  The system passes automatically. | Yes |

**Pre-condition:** It’s the turn for the player to hand over cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Give hints to player | 1. The player press hint button twice. | System highlights the second option of qualified cards which are higher than the previous option, if possible. | Yes |

**Pre-condition:** It’s the turn for the player to hand over cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Give hints to player | 1. The player doesn’t click on play within the 20 seconds | System automatically hands over the smallest card | Yes |

### **Pass in the turn**

**Purpose:** A player is able to pass this turn and keep current cards

**Pre-condition:** It’s the turn for player to play

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Pass in the turn | 1. Player clicks pass button and skip this turn | System gives the turn to next player | Yes |

**Pre-condition:** It’s the turn for player to play

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Pass in the turn | 1. The player doesn’t click on play within the 20 seconds | System automatically hands over the smallest card | Yes |

### **Give leftover cards to landlord**

**Purpose: Give leftover cards to landlord**

**Pre-condition: landlord has been determined**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Give leftover cards to landlord |  | System give the leftover cards to the landlord | Yes |

### **Determine the order**

**Purpose: Determine the order of hand**

**Pre-condition: landlord has been determined and game start with first round**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Determine the order |  | Landlord becomes the first one to play a card, and the system continues with the anti-lock sequence. | Yes |

**Pre-condition: The first round finished**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Determine the order |  | The player who beat other two players’ cards in first round will be the first one to play card in second and later round, and system continue with anti-lock sequence | Yes |

### **Display game over messages**

**Purpose:** Give result to all players when game ends

**Pre-condition:** One of the player's hands over all the cards

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Display the game over messages |  | The system displays the winner messages and loser messages to exact players. | Yes |

### **Record total score**

**Purpose:** The system will record total score of every user

**Pre-condition:** The game over messages has displayed

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Method** | **Expected result** | **Result** |
| Record the total score |  | System pops up a summary window which shows a total score of landlord and farmers gained during the round.  The system gives options to players to play the second round or quit. | Yes |

# **Reference**

[1] ]http://istqbexamcertification.com/what-is-fundamental-test-process-in-software-testing/