

# Euchre Game: Test Plan

ID:1	Trump should be reflected by the suit chosen	Priority 2
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## Tests:

- 1.1: Trump suit chosen by the player
  - Instructions
    - Create a new game and pass, continuing until given the opportunity to choose a trump suit
    - Play a card of the selected trump suit during the game
  - Expected Results
    - Playing the trump suit when other players do not should cause the trick counter to increment by one

ID:2	The trick counter should reset	Priority 1
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## Tests:

- 2.1: Reset at end of trick
  - Instructions
    - Create and play a game
    - After all five tricks are complete and new cards are dealt, examine the counter
  - Expected Results
    - The counter should be 0
- 2.2: Reset on new game
  - Instructions
    - Create and play part of a game
    - Create a new game, discarding the current one
  - Expected Results
    - The counter should reset to 0

ID:3	Cards should not be duplicated within the deck	Priority 1
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## Tests:

- 3.1: Check for duplication
  - Instructions
    - Create a new game
    - Examine the visible cards to ensure that no duplicates exist
    - Repeat as necessary
  - Expected Results
    - The same card should not appear more than once in the game window

ID:4	The cards for the AI players should be displayed correctly	Priority 3
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**Tests:**

- 4.1: UI Displays correctly
  - Instructions
    - Launch the application
    - Create a new game
    - Click “Start Game”
  - Expected Results
    - All elements appear full
    - All elements are visible

ID:5	Stick the dealer should be enabled	Priority 2
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**Tests:**

- 5.1: Check stick the dealer
  - Instructions
    - Open the application
    - Click “Start a new game”
    - Click Stick the dealer
    - Start the game
  - Expected Results
    - Stick the dealer should be enabled
    - Stick the dealer rules should actually be applied

ID:6	Trump icon should appear by the player who ordered up/called suit and should appear correct	Priority 3
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**Tests:**

- 6.1: Ordering-up trump
  - Instructions
    - Begin a game
    - Have a player order-up
  - Expected Results
    - Trump icon should reflect that of the card that got picked up
    - Trump icon should appear next to the player who ordered-up
- 6.2: Calling trump
  - Instructions
    - Begin a game
    - Have all players pass (no one orders-up)

- Have a player declare trump
- Expected Results
  - Trump icon should be what was called
  - Trump icon should appear by the player who called trump

ID:7	The winner of a trick should lead the next trick	Priority 1
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**Tests:**

- 7.1: Check that the winner of a trick leads the next trick
  - Instructions
    - Begin playing a game
    - Have someone win a trick
  - Expected Results
    - The player winning the trick should be the first player to play during the next trick

ID:8	Going alone should be enabled	Priority 2
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**Tests:**

- 8.1: Check going alone
  - Instructions
    - Open the Applications
    - Click “New Game” and start
    - Begin playing the game
  - Expected Results
    - After ordering up a card, a dialog should appear asking the player if they want to “go alone”

ID:9	The player to the left of the dealer should lead the first trick	Priority 1
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**Tests:**

- 9.1: The player left of the dealer leads the first trick
  - Instructions
    - Open the application
    - Begin a new game
  - Expected Results
    - Whoever is left of the dealer should be the first person to play during the first trick

ID:10	If there is no trump played the highest card of the suit	Priority 1
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	that led should take the trick	
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**Tests:**

- 10.1: Ensure that highest card wins
  - Instructions
    - Create and play a new game
    - After a trick in which no trump is played, examine the highest card of the leading suit
  - Expected Results
    - The counter corresponding to the player who played this card should increment

ID:11	Appropriate player wins the trick	Priority 1
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**Tests:**

- 11.1 User wins the trick
  - Instructions
    - Open the application
    - Begin a new game
    - Win a trick
  - Expected Results
    - You should have won the trick, counter should update
- 11.2 AI wins the trick
  - Instructions
    - Open the application
    - Begin a new game
    - Let an AI win a trick
  - Expected Results
    - The appropriate AI should have won the trick, counter should update

ID:12	Appropriate scoring is done after round	Priority 1
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**Tests:**

- 12.1: You call trump and win 3 or 4 tricks
  - Instructions
    - Open the application
    - Begin a new game
    - Order-up or declare trump
    - Win 3 or 4 tricks (not 5)
  - Expected Results
    - You should be given one point

- 12.2: You call trump and win less than 3 tricks
  - Instructions
    - Open the application
    - Begin a new game
    - Order-up or declare trump
    - Win less than 3 tricks
  - Expected Results
    - The other team should be given two points for a successful euchre
- 12.3: You call trump and win all 5 tricks
  - Instructions
    - Open the application
    - Begin a new game
    - Order-up or declare trump
    - Win all 5 tricks
  - Expected Results
    - You should be given two points for a successful march

ID:13	Cards should not change (i.e. when ordered up or between tricks)	Priority 1
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#### Tests:

- 13.1: Cards should not change when a suit is ordered up
  - Instructions
    - Create a new game
    - Pick the suit immediately
  - Expected Results
    - The player's hand should not change
- 13.2: Cards should not change between tricks
  - Instructions
    - Create a new game and play one trick
    - At the end of the first trick, examine the current hand
  - Expected Results
    - The cards in the current hand should not have changed

ID:14	Only cards that are invalid plays should be grayed out	Priority 1
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#### Tests:

- 14.1 Cards that are not of the lead suit should be grayed out
  - Instructions
    - Play the game
    - Note non-playable cards' colors

- Expected Results
  - Cards that cannot be played should be gray
- 14.2 The left bower should correctly be identified as the trump suit
  - Instructions
    - Play the game
    - When you have the left bower in your hand, note it's color when the suit it says is lead
  - Expected Results
    - The bower should be grayed out when its suit is played

ID:15	If the user closes the new game dialog the program should not exit	Priority 1
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**Tests:**

- 15.1 Close the dialog
  - Instructions
    - Open the start a game dialog
    - Close the dialog box
  - Expected Results
    - Dialog box should close, game box remains open

ID:16	When a new game is created everything should be reset	Priority 2
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**Tests:**

- 16.1 Restarting a new game
  - Instructions
    - Start a game
    - Play for a while
    - Start a new game
  - Expected Results
    - New game should not show any of the values (scores/hands/tricks) from the old game

ID:17	When everyone passes once only the three remaining suits should be available for selection	Priority 2
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**Tests:**

- 17.1 Suits shown should not have been turned down earlier
  - Instructions
    - Play the game
    - Note the suit that is proposed

- Wait for it to be up to you again in that round
- Expected Results
  - The suit shown earlier should not be listed; just the other 3

ID:18	Changing the names of players in the new game dialog should cause the new names to appear in the game	Priority 3
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#### Tests:

- 18.1: Changing the names
  - Instructions
    - Create a new game
    - Enter arbitrary values for the names.
    - Start game
  - Expected Results
    - Show the given names in their proper locations in the game window.

ID:19	When creating a new game, it can correctly rename all players	Priority 3
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#### Tests:

- 19.1: No players can share the same name
  - Instructions
    - Launch the application
    - Create a new game
    - Enter the same name to opponent names and teammate name
    - Click "Create Game"
  - Expected Results
    - The new game won't be created
    - The system asks to change players' names
- 19.2: Rename the players
  - Instructions
    - Launch the application
    - Create a new game
    - Enter different names to opponent names and teammate name
    - Click "Create Game"
  - Expected Results
    - All names are updated on the new game window

