

Manual Test Plan

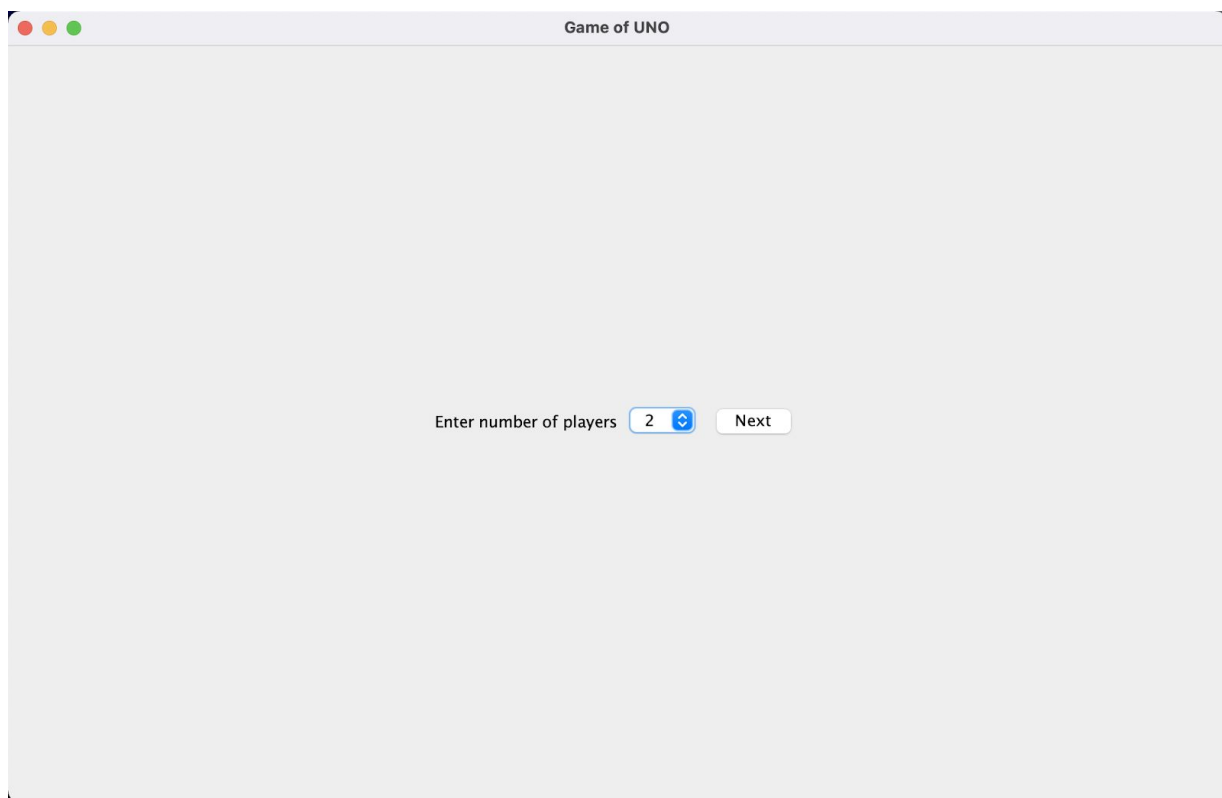
Prerequisites

1. Java Compiler
2. JDK 15

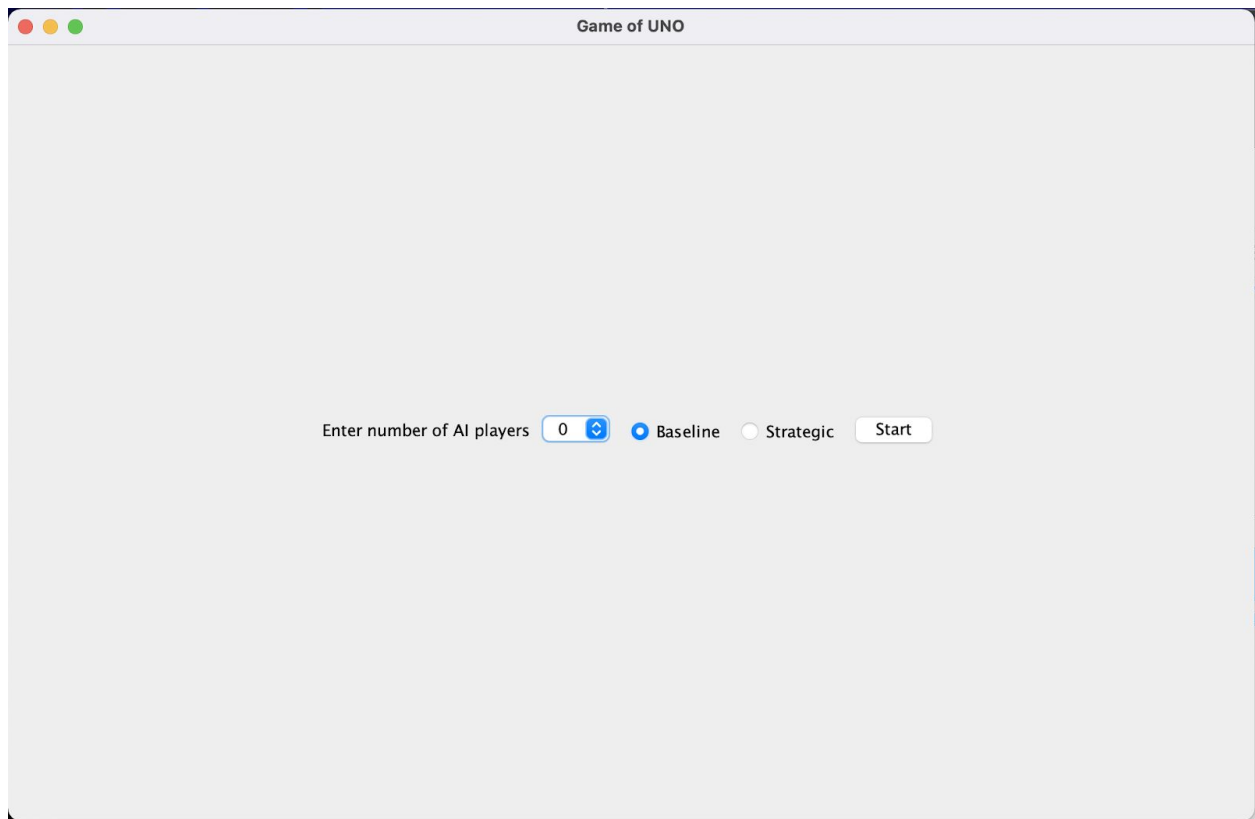
Environment Setup and configurations

- Mac OS environment
- Conduct manual testing by manually validating each functionality by creating and executing test cases. (<https://reqtest.com/testing-blog/gui-testing-tutorial/>)

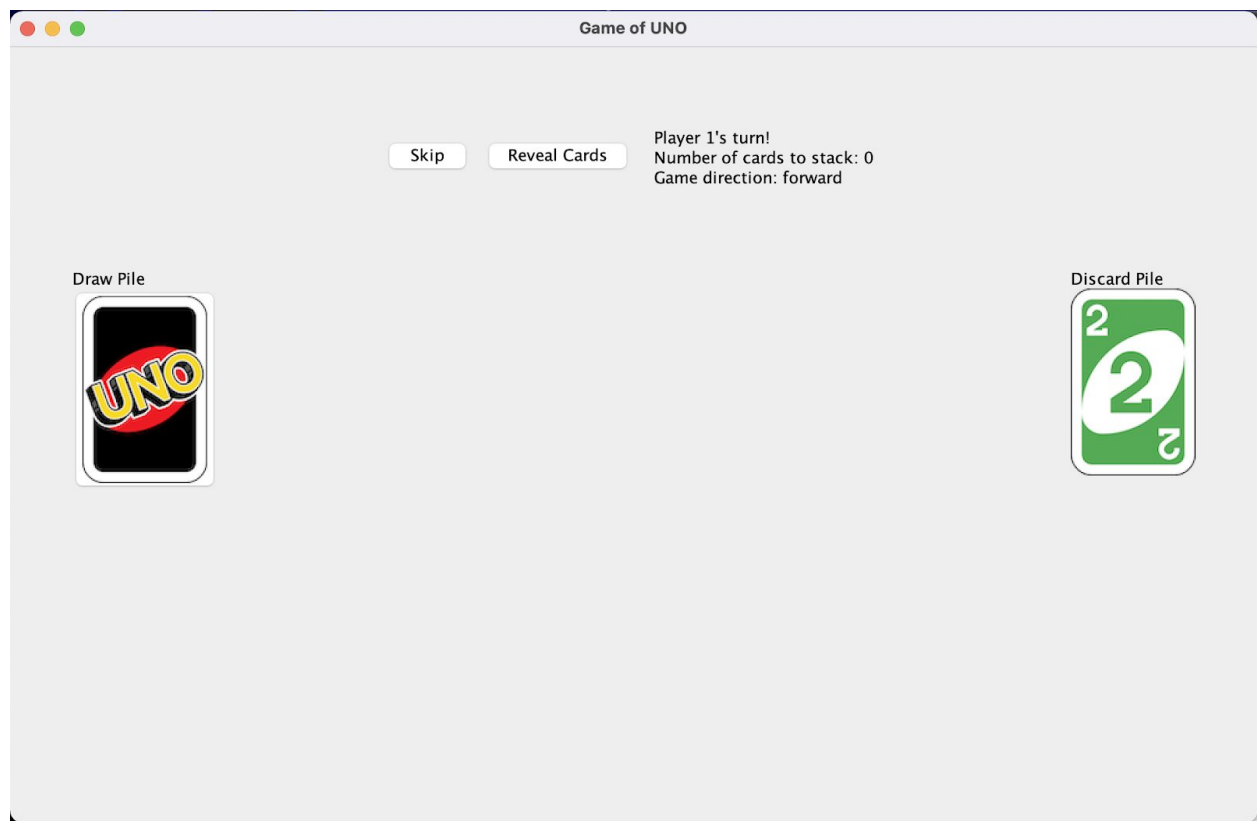
Operations and the results



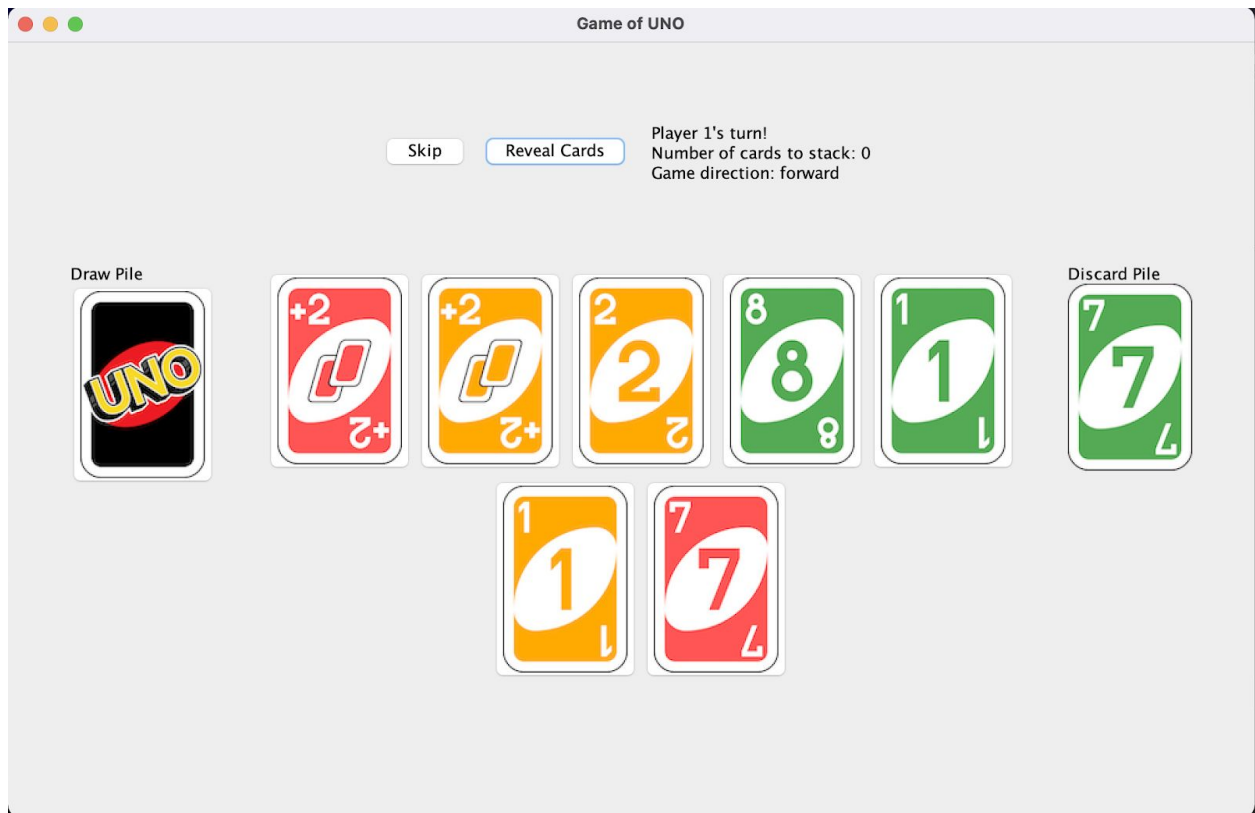
- User can select number of players in the game initially



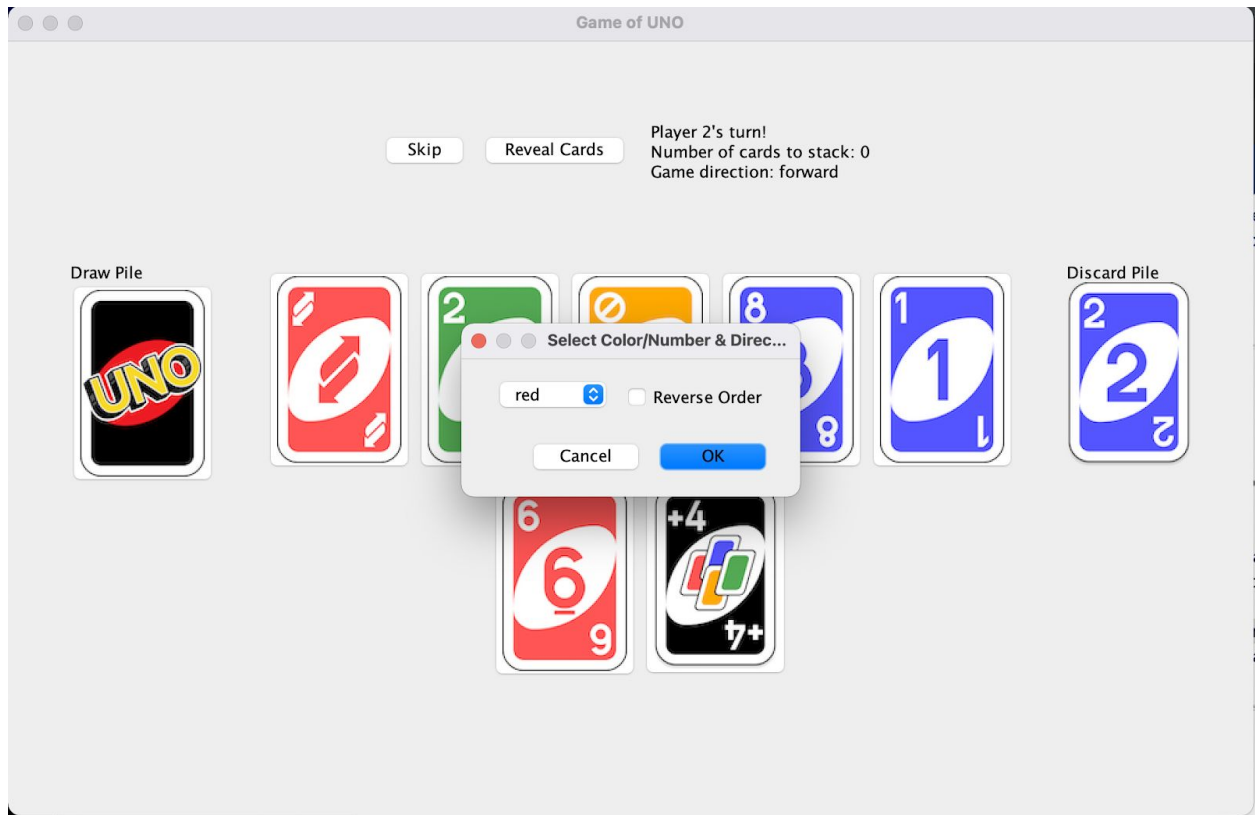
- User can decide number and types of AI players in their game



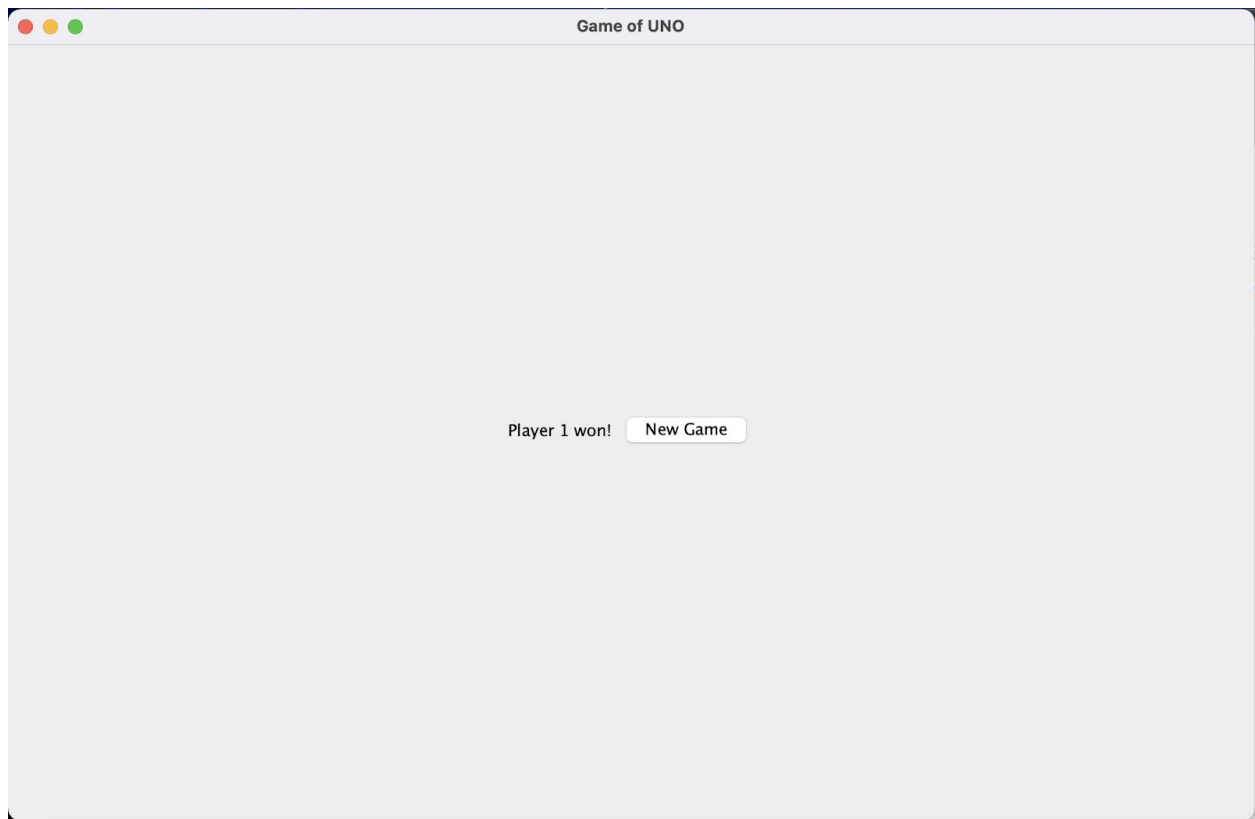
- The state of the game, such as the last card to match, the number of card to stack, and the player of current turn should be displayed
- Skip button to move onto next turn
- Reveal Cards button to reveal/hide cards of the player of the current turn to prevent opponents see current player's cards



- On click reveal -- view current player's hand



- Allow player to select color if a wild card or wild draw four card is picked



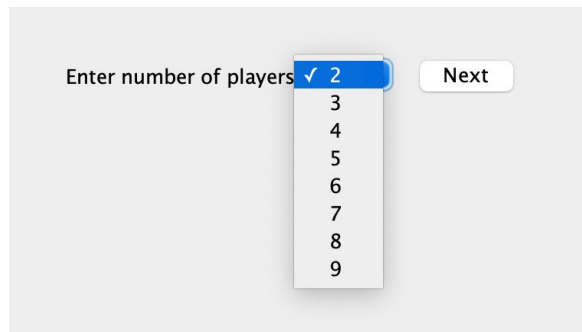
- Game ending scene to indicate the winner

Test Items

1. Create game
 - a. Check if the UI includes a player number input and start button (success)

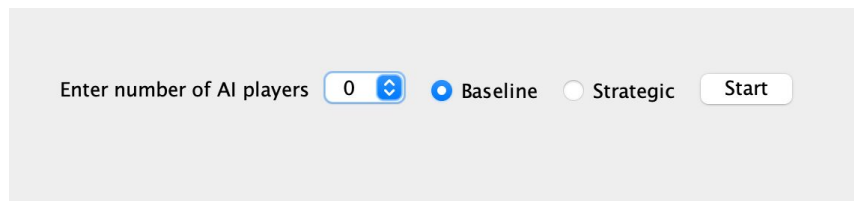


- b. Check if the create game screen restricts the number of players (success)



A screenshot of a user interface for creating a game. It features a label 'Enter number of players' followed by a dropdown menu. The dropdown is open, showing a list of numbers from 2 to 9. The number 2 is selected, indicated by a checkmark and a blue highlight. To the right of the dropdown is a 'Next' button.

- c. Check if the UI asks the player to can decide number and type of AI players in their game (success)



A screenshot of a user interface for configuring AI players. It includes a label 'Enter number of AI players' followed by a dropdown menu showing the number 0. To the right of the dropdown are two radio buttons: 'Baseline' (which is selected) and 'Strategic'. Further to the right is a 'Start' button.

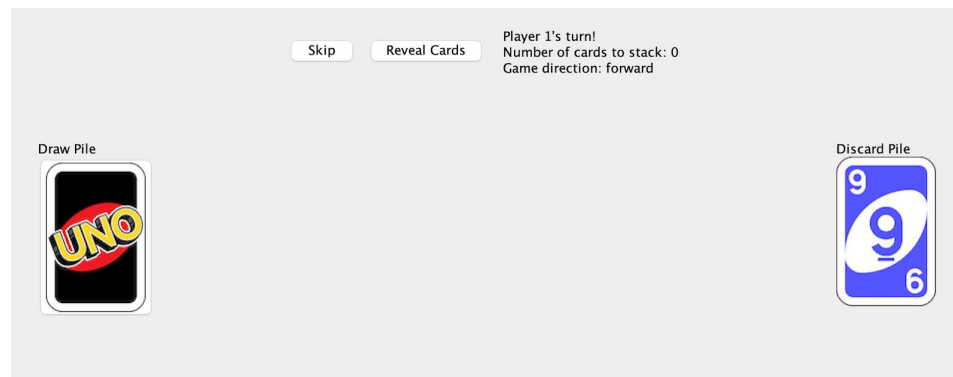
- d. Check if the game screen restricts the number of players based on initial player number selection -- if 3 players are chosen only 0-2 players can be AI (success)



A screenshot of a user interface for configuring AI players. It features a label 'Enter number of AI players' followed by a dropdown menu. The dropdown is open, showing a list of numbers: 0, 1, and 2. The number 0 is selected, indicated by a checkmark and a blue highlight. To the right of the dropdown are two radio buttons: 'Baseline' (which is selected) and 'Strategic'. Further to the right is a 'Start' button.

2. Play game

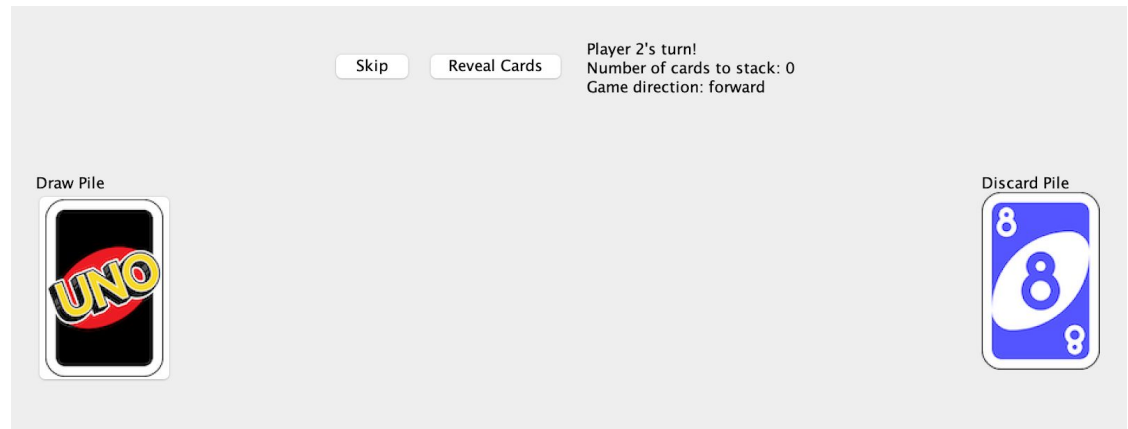
- a. Check if the game displays the correct functions (success)
 - i. Draw and discard pile
 - ii. The state of the game, such as the number of card to stack, and the player of current turn should be displayed
 - iii. Current player's cards are hidden
 - iv. Skip and reveal cards buttons



- b. Check if the reveal cards button reveals the card faces (success)
- c. Check if the each user gets 7 cards initially (success)
- d. Check if the initial card in the discard pile is NOT a special card (success)



- e. If a card is played successfully, make sure... (success)
 - i. Discard pile is updated with the card played
 - ii. Turn is updated in details section in the top panel
 - iii. Next player's cards are hidden



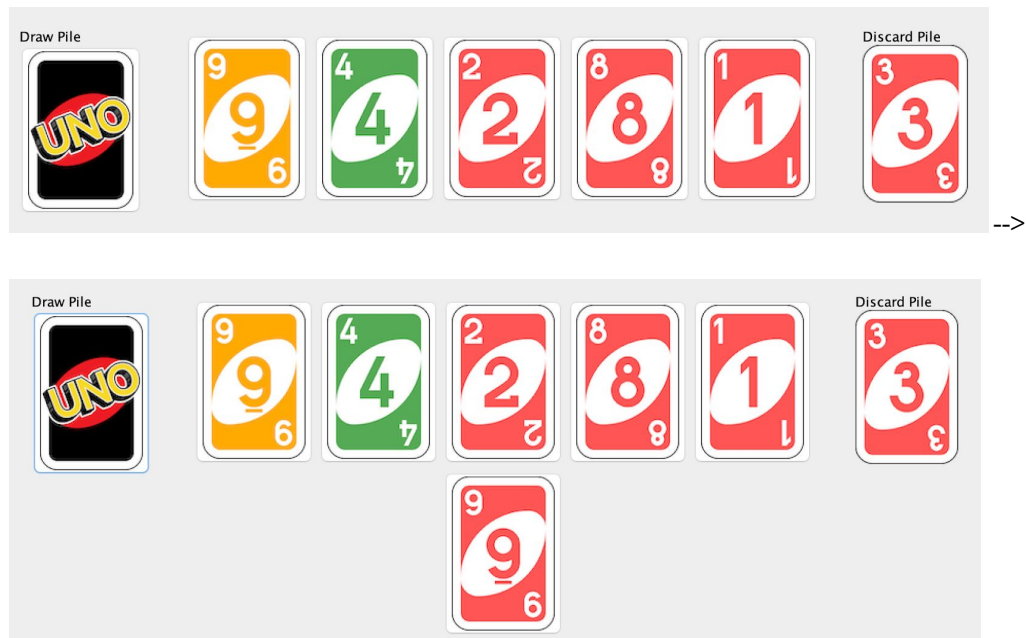
- f. Check if UI allows player to select a color or number, if a wild card or wild draw four card is picked (success)
- g. Check if UI allows player to reverse the order of the game, if a wild card or wild draw four card is picked (success)



- h. If a wild card or wild draw 4 card is played, make sure the UI displays what the next player should play -- number or color (success)



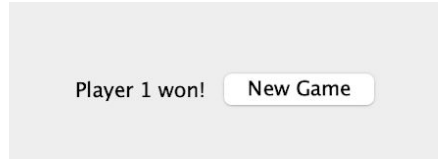
- i. Check if upon clicking draw pile, the current player's cards update (success)



- j. Pictures not included but tested:
- i. Check if the skip turn button, updates the game state (success)
 - ii. Check if illegal moves are NOT allowed (success)
 - iii. Check if illegal moves display error messages (success)
 - iv. Check if draw 4 & draw 2 stacking rules are implemented (success)
 - v. Check if user is NOT allowed to skip turn until card is drawn or played (success)

3. End game

- a. Check if the game is redirected to end scene once a player runs out of cards (success)



- b. Check if new game is created upon clicking new game button (success)