

Manual Test Plan

Prerequisites:

This project has been tested on Java Version 8.

This project was developed with IntelliJ IDEA (Eclipse is another option).

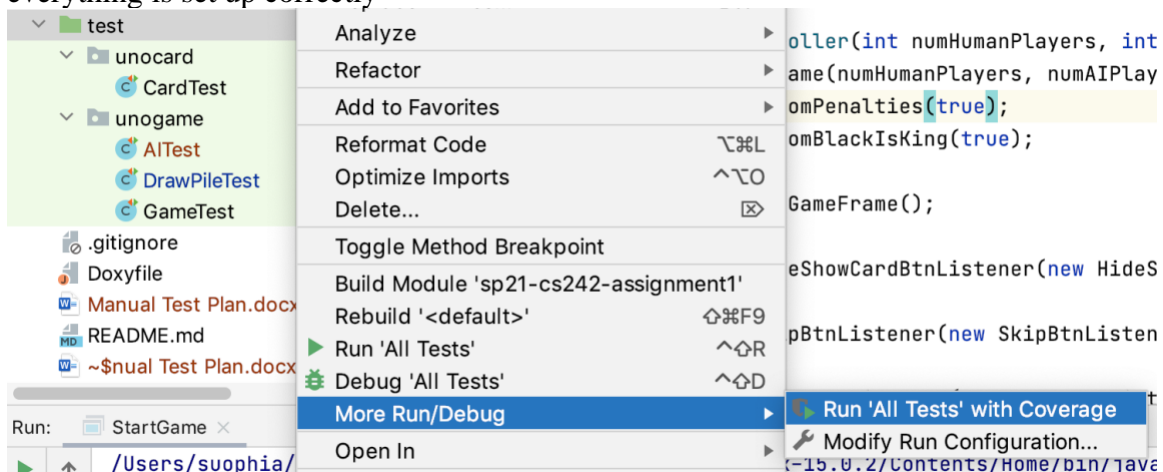
Make sure you have all of those installed before beginning.

Environment Setup and Configurations:

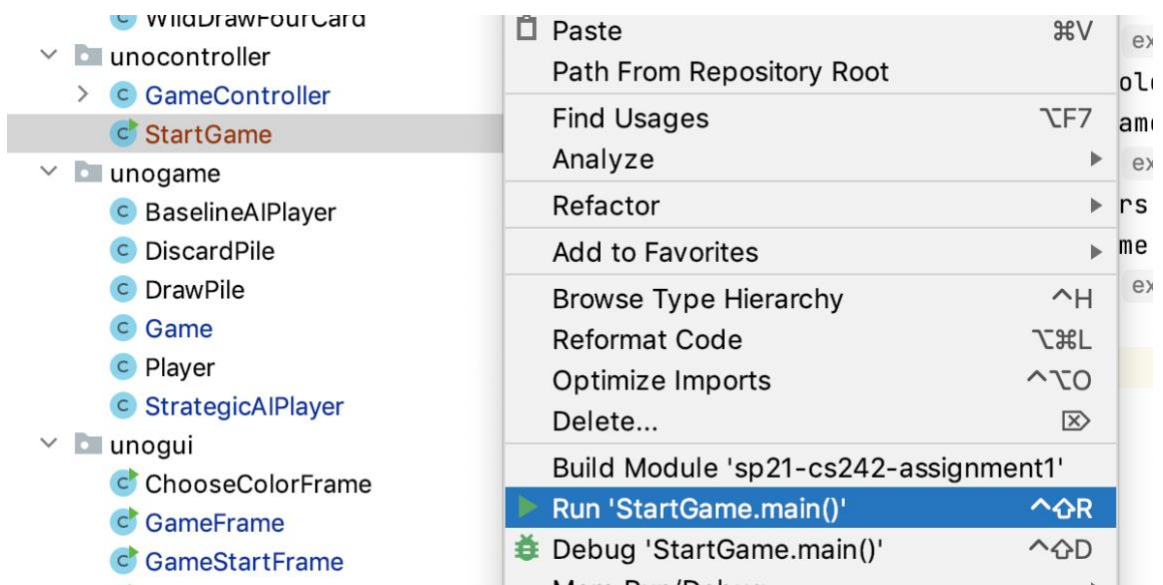
git clone <https://gitlab.engr.illinois.edu/yiyins2/sp21-cs242-assignment1.git>

cd sp21-cs242-assignment1

Right click “test” folder -> More Run/Debug -> Run ‘All Tests’ with coverage to verify everything is set up correctly



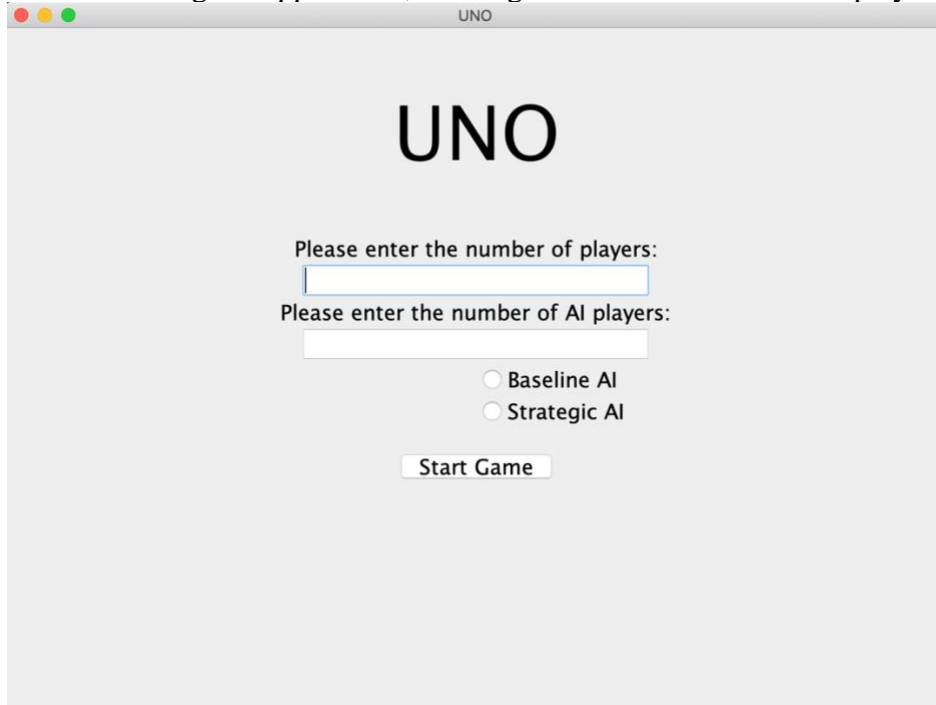
You can run the application by right clicking “unocontroller/StartGame” and selecting Run ‘StartGame.main()’



Manual Tests:

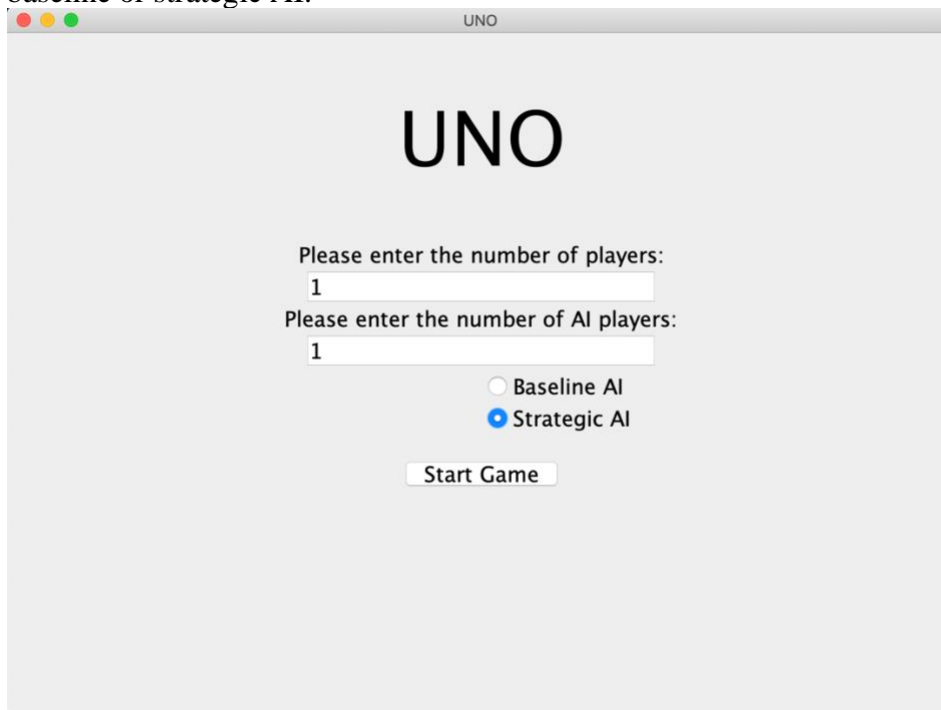
Start Game:

After launching the application, a dialogue to enter the number of players is presented.



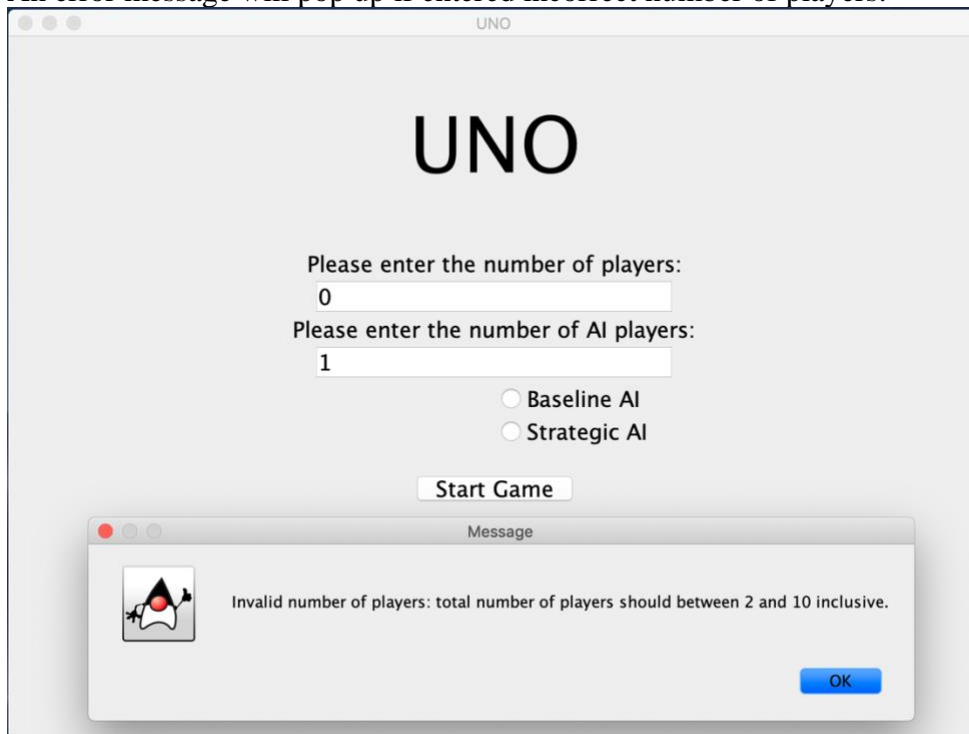
The screenshot shows a window titled "UNO" with a light gray background. At the top center, the word "UNO" is displayed in a large, bold, black font. Below it, there are two text prompts: "Please enter the number of players:" followed by an empty text input field, and "Please enter the number of AI players:" followed by another empty text input field. Below these fields are two radio button options: "Baseline AI" and "Strategic AI". At the bottom center, there is a button labeled "Start Game".

The user can enter 2 to 10 human and AI players combined and choose whether to play with baseline or strategic AI.



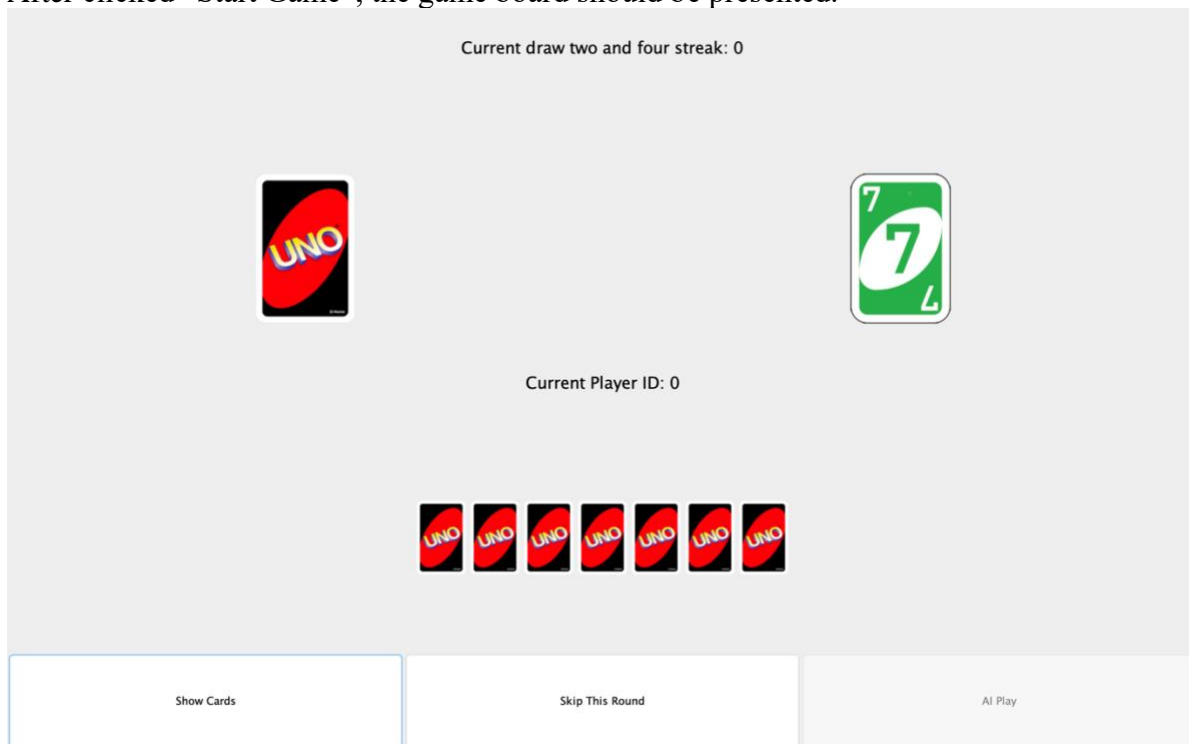
This screenshot shows the same "UNO" window as the previous one, but with user input. The text input field for "Please enter the number of players:" now contains the number "1". The text input field for "Please enter the number of AI players:" also contains the number "1". The "Strategic AI" radio button is now selected, indicated by a blue dot, while the "Baseline AI" radio button is unselected. The "Start Game" button remains at the bottom center.

An error message will pop up if entered incorrect number of players:

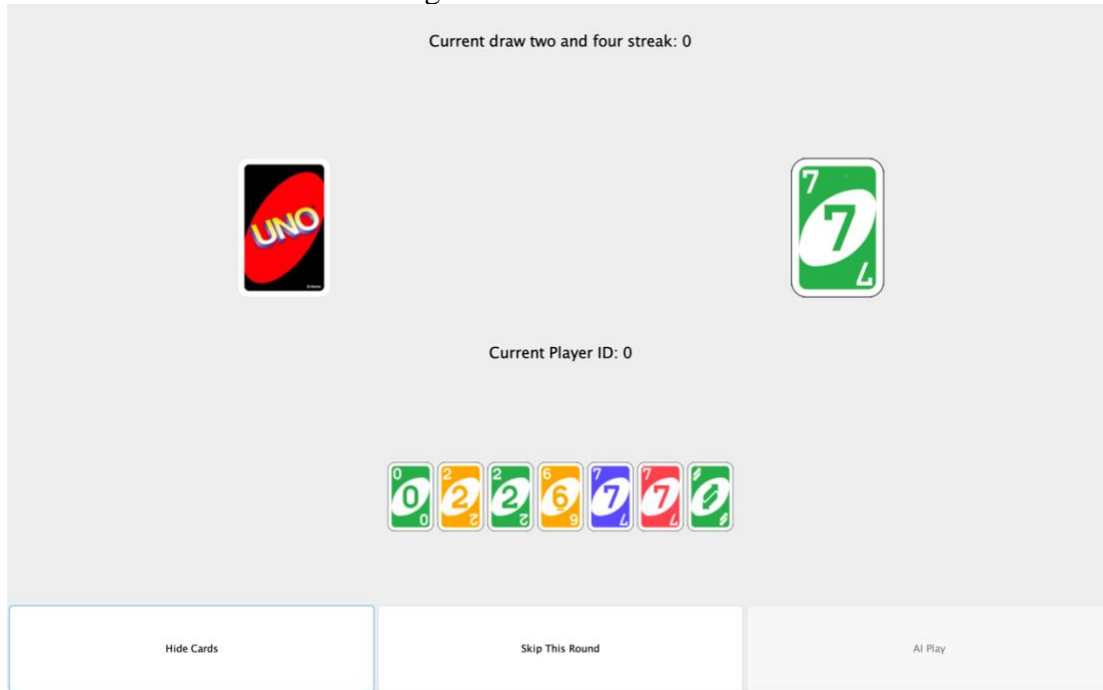


Basic Game Scene:

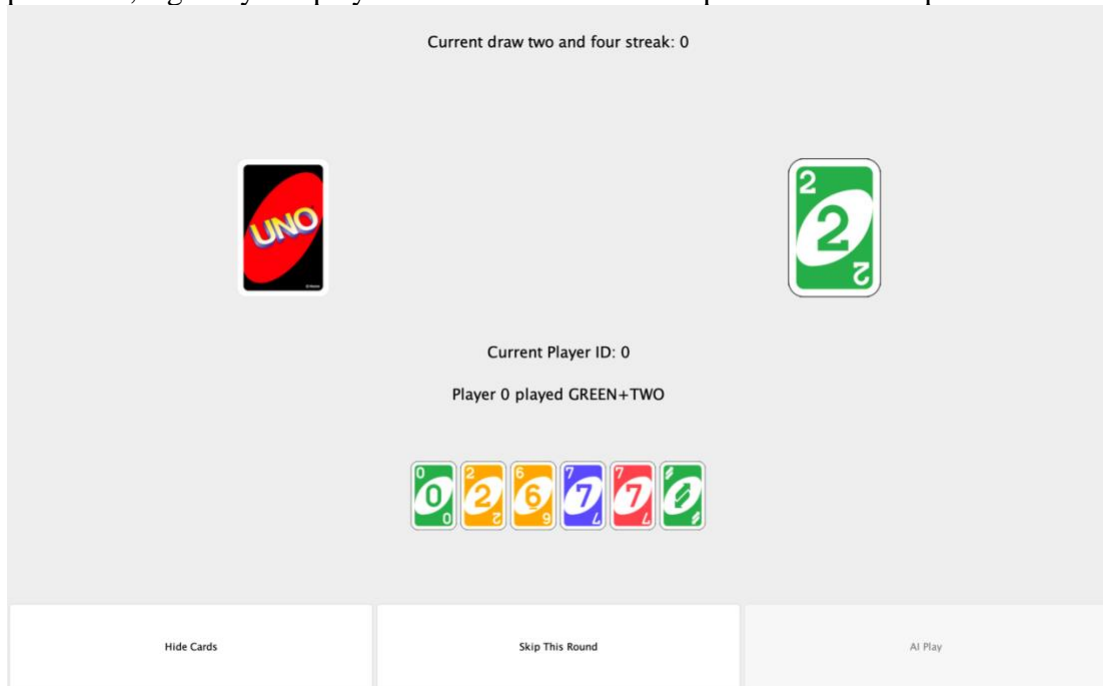
After clicked “Start Game”, the game board should be presented.



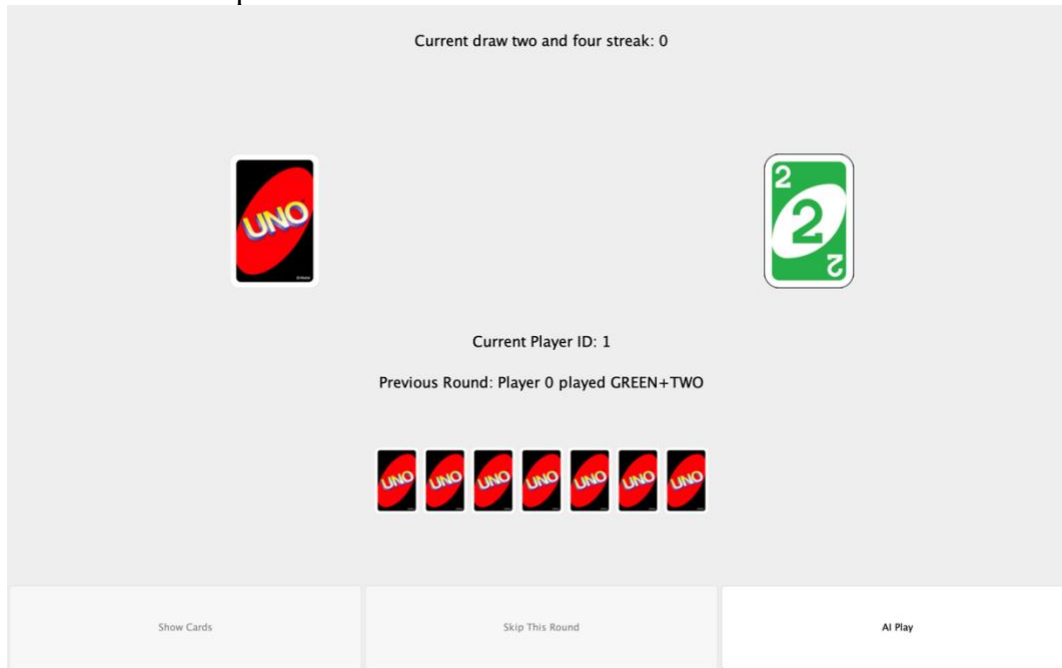
The “Show Cards” button can be clicked to show the hand for current player. The “Hide Cards” can be clicked to hide the hand again.



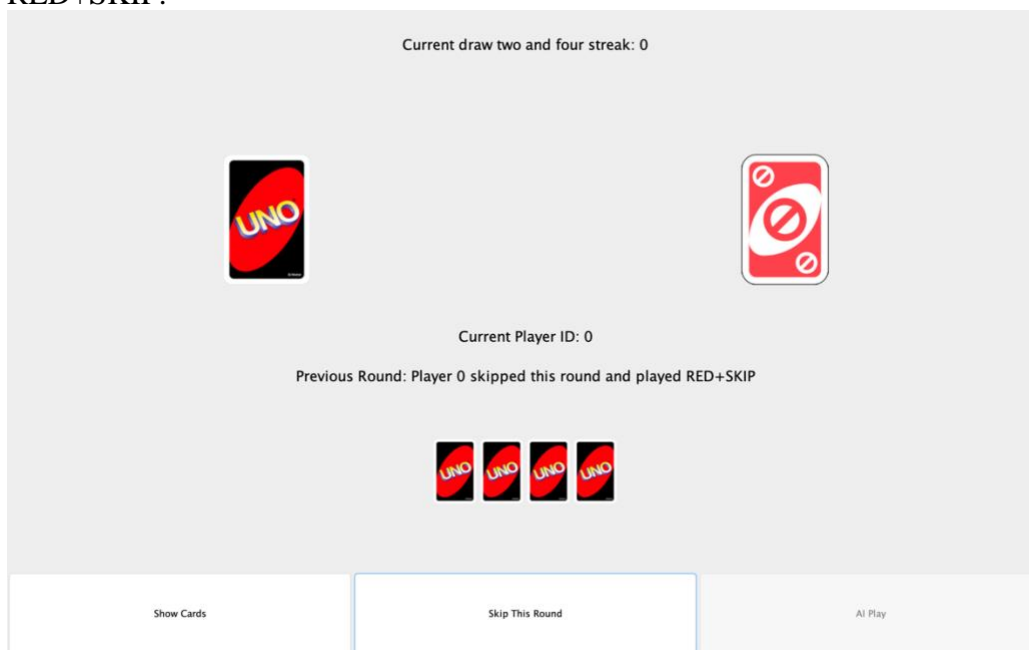
Users can click on the card to play. After playing a card, the played card information will be presented, e.g. Player 0 played GREEN+TWO. The top card of discard pile will also be updated.



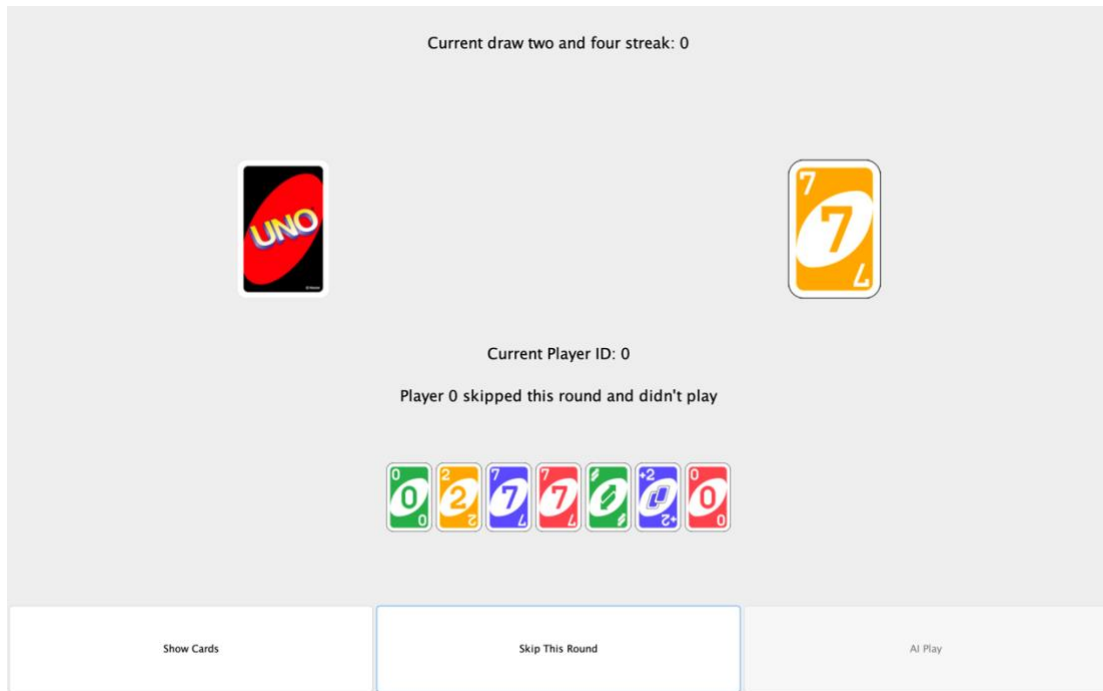
After three seconds, the current player's hand will be automatically hidden (the time to wait can be changed in src/unocontroller/GameController -> WAIT_TIME), and move on to the next player. If next player is AI, the "Show/Hide Cards" and "Skip This Round" button will be disabled, and "AI Play" button will be enabled to let user to AI play this round. Also, information from previous round will be shown.



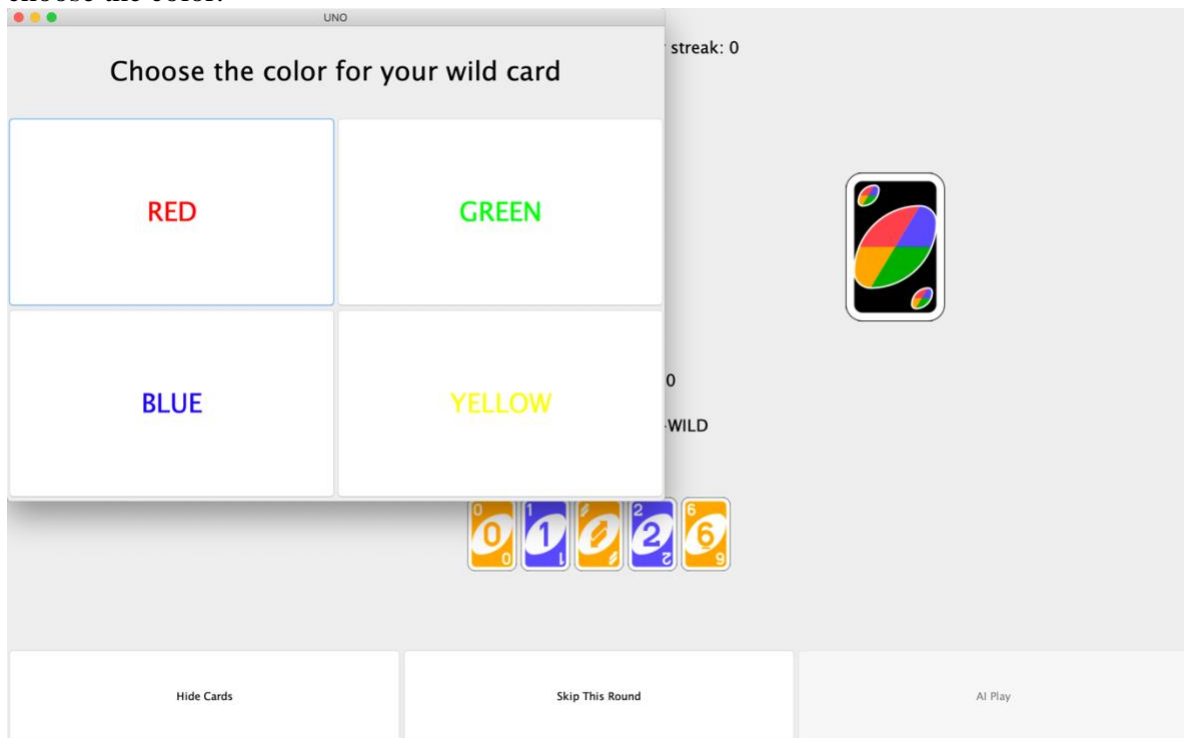
User can click "Skip This Round" to skip, a card will be automatically drawn and played if the drawn card matches the top card of the discard pile, e.g. Player 0 skipped this round and played RED+SKIP.



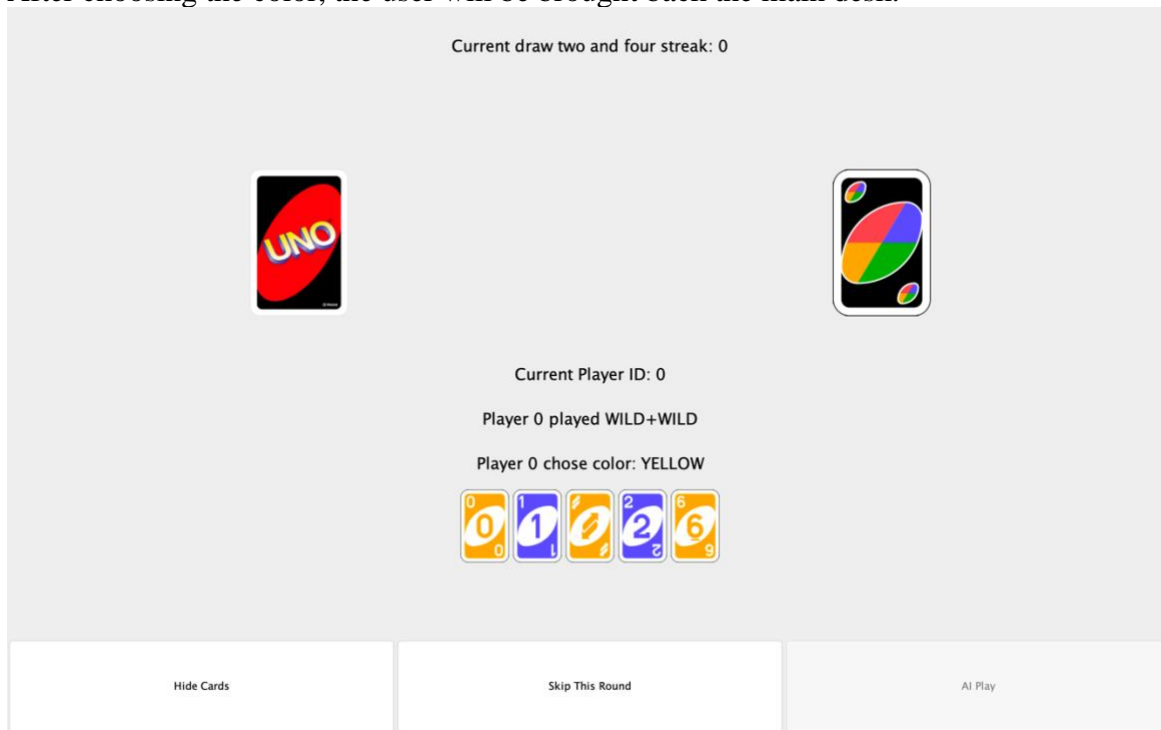
If the drawn card does not match the top card, it will be added to the player's hand.



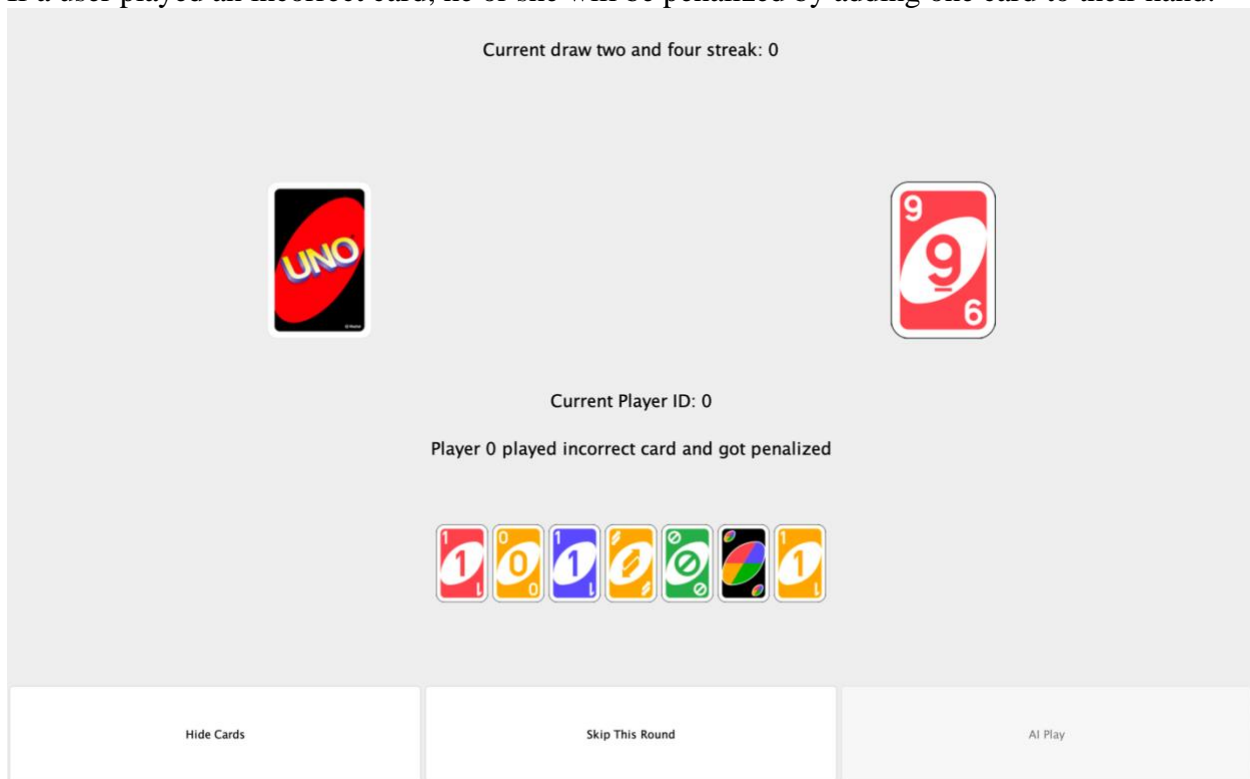
If the player played a wild or wild draw four cards, a window will be popped up to let user to choose the color.



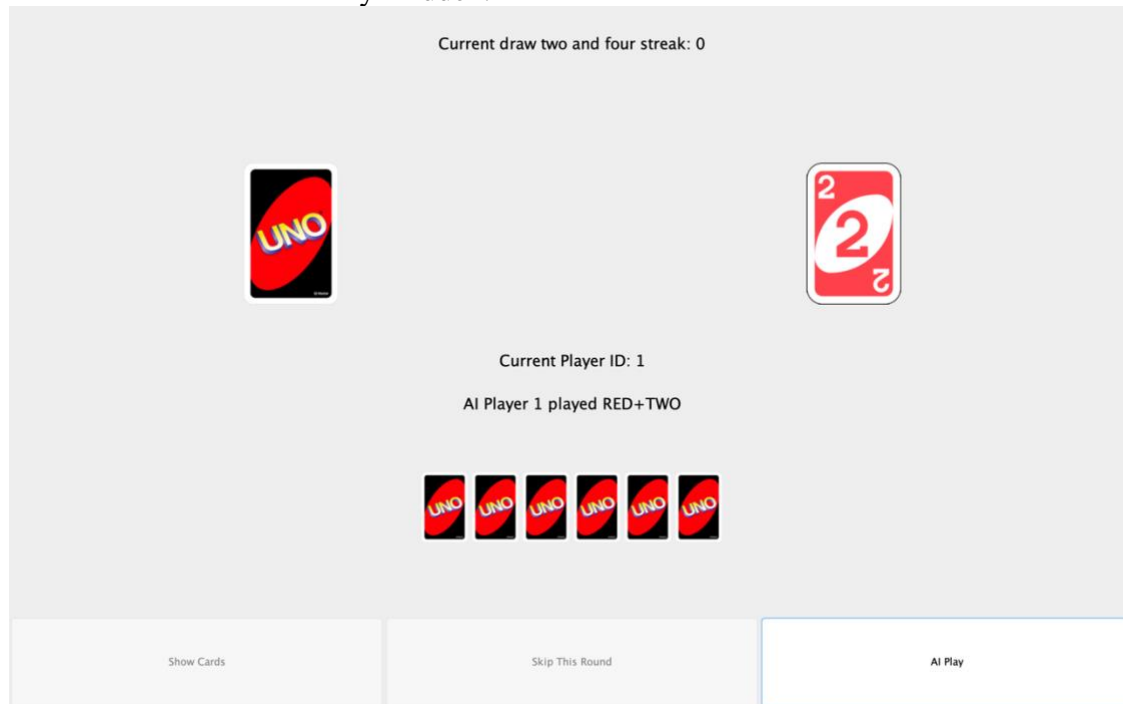
After choosing the color, the user will be brought back the main desk.



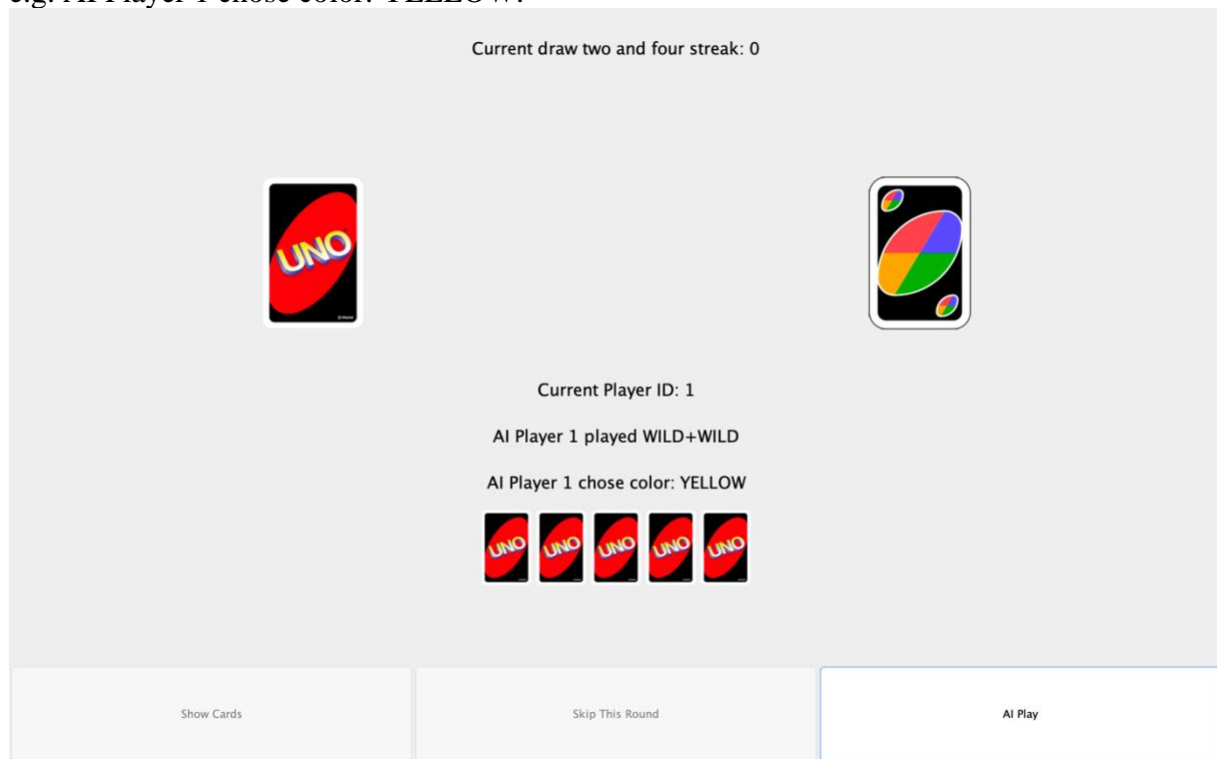
If a user played an incorrect card, he or she will be penalized by adding one card to their hand.



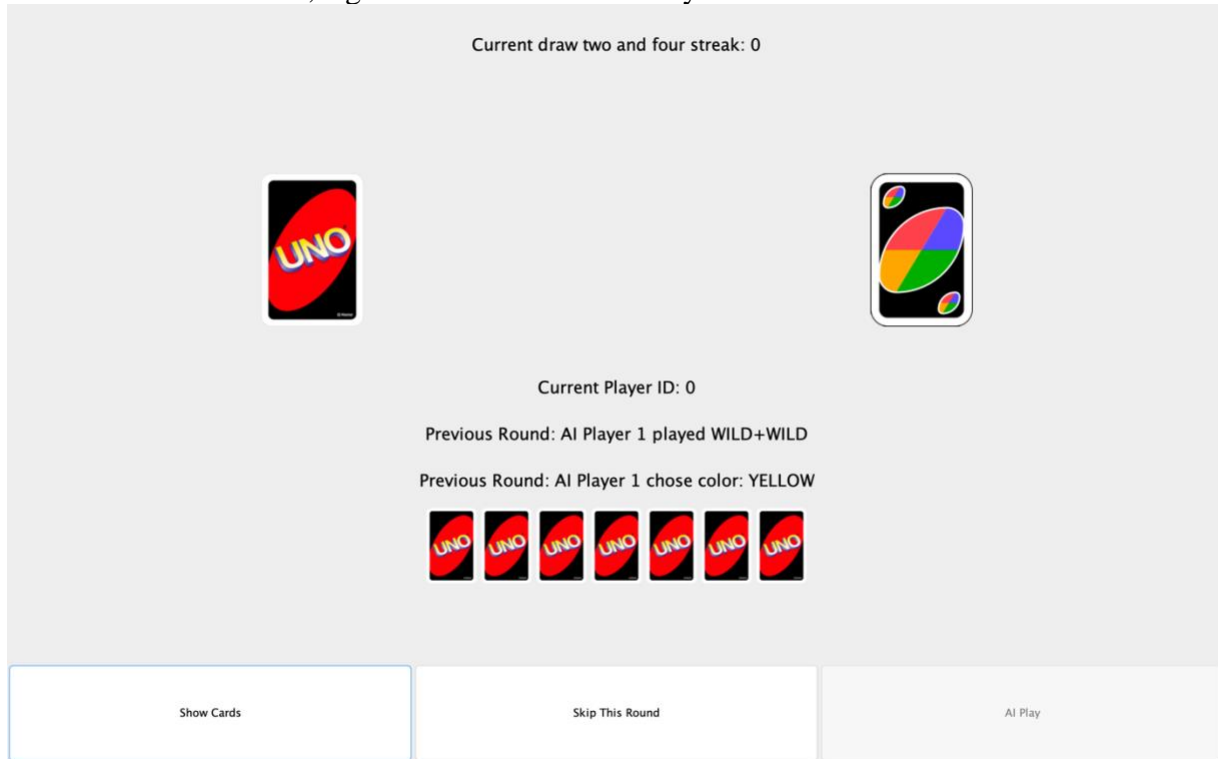
After clicking “AI Play”, the AI’s move will be presented, e.g. AI Player 1 played RED+TWO, while the AI’s hand is always hidden.



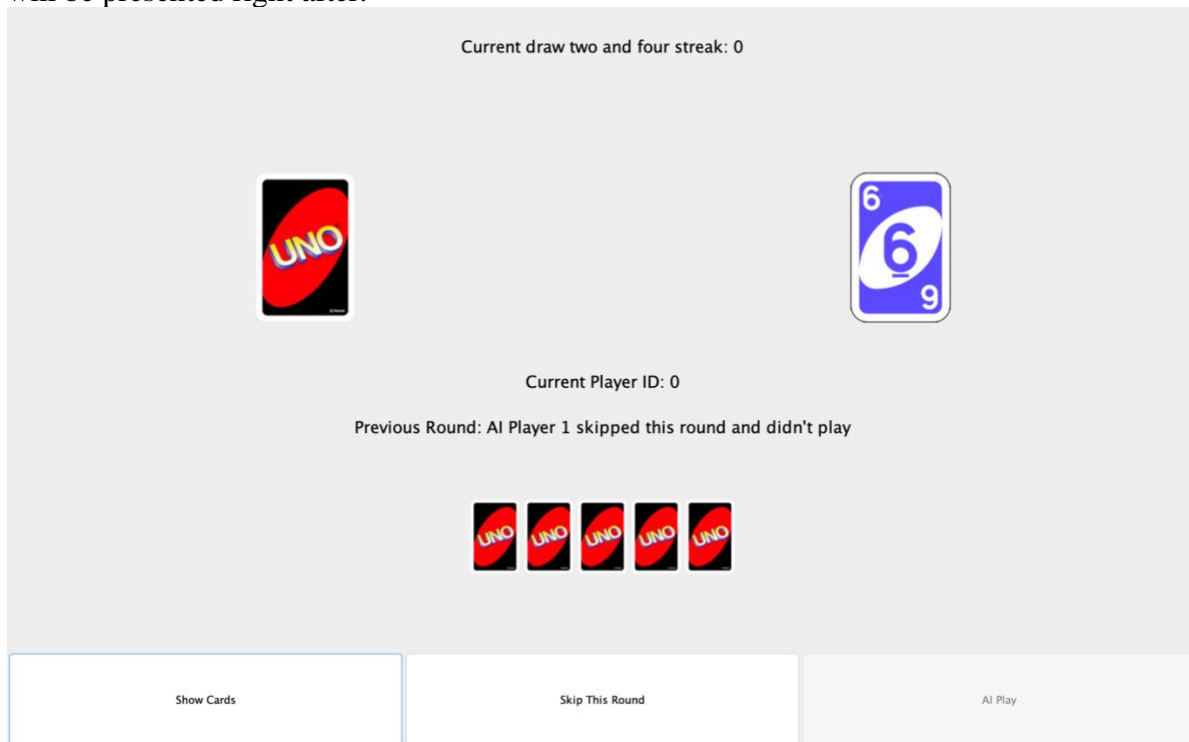
The AI player will also choose the color for wild cards and wild draw four cards automatically, e.g. AI Player 1 chose color: YELLOW.



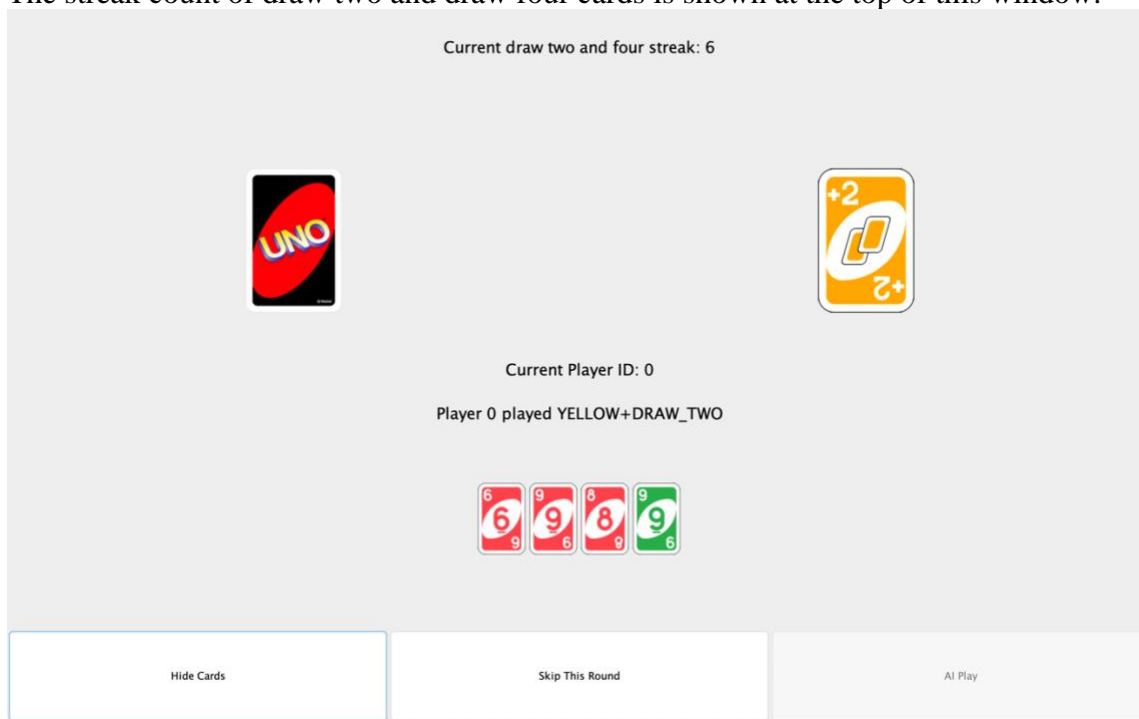
If a wild card or wild draw four card is played and color is chosen, this information will be carried until next round, e.g. Previous Round: AI Player 1 chose color: YELLOW.



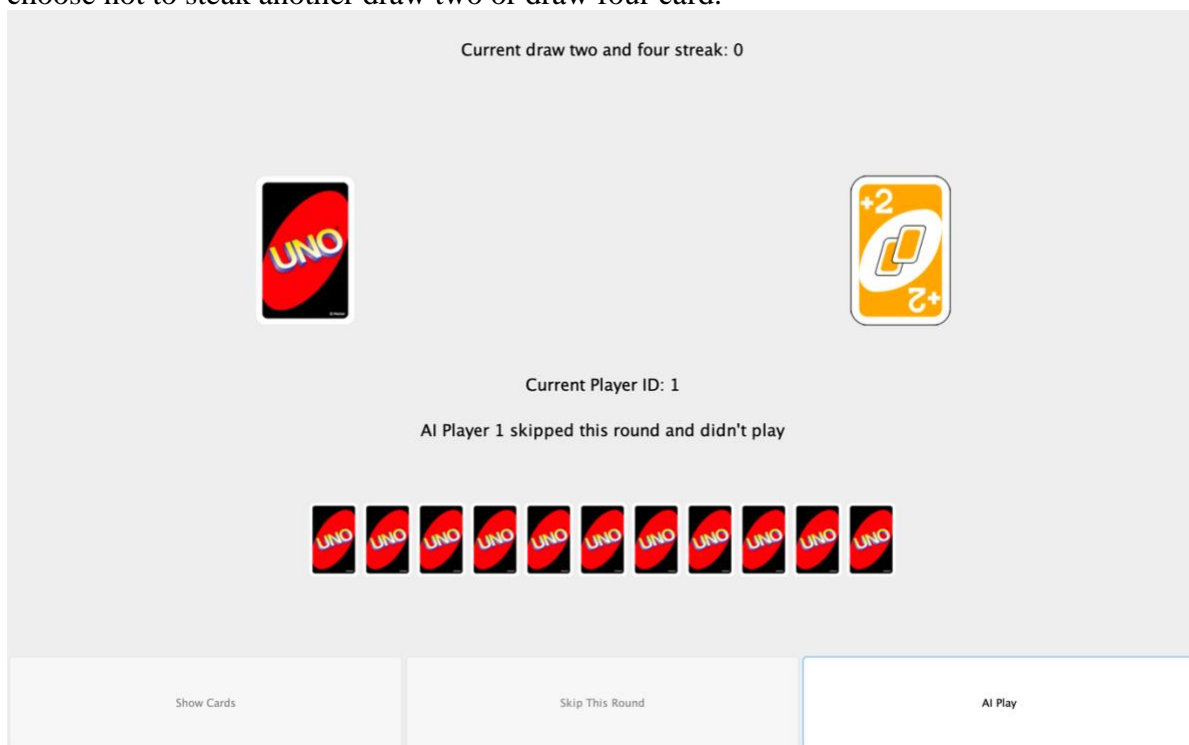
The AI can also decide to skip this round and information about the drawn card after skipping will be presented right after.



The streak count of draw two and draw four cards is shown at the top of this window.





The penalty from draw two and draw four streak will be automatically applied if the player choose not to steak another draw two or draw four card.



The special effect of reverse and skip cards will also be automatically applied.








Current draw two and four streak: 0





Current Player ID: 0

Previous Round: AI Player 1 played YELLOW+REVERSE





Show Cards

Skip This Round

AI Play







Current draw two and four streak: 0





Current Player ID: 1

Previous Round: AI Player 1 played RED+SKIP



Show Cards

Skip This Round

AI Play

If a player played out all the cards, a winner window will be popped. The “Start A New Game” allow user to start a new game by switching to the start game frame. If the user does not want to continue, he or she can just close the window.

