Manual Test Plan for sp21-CS242-assignment 1-2
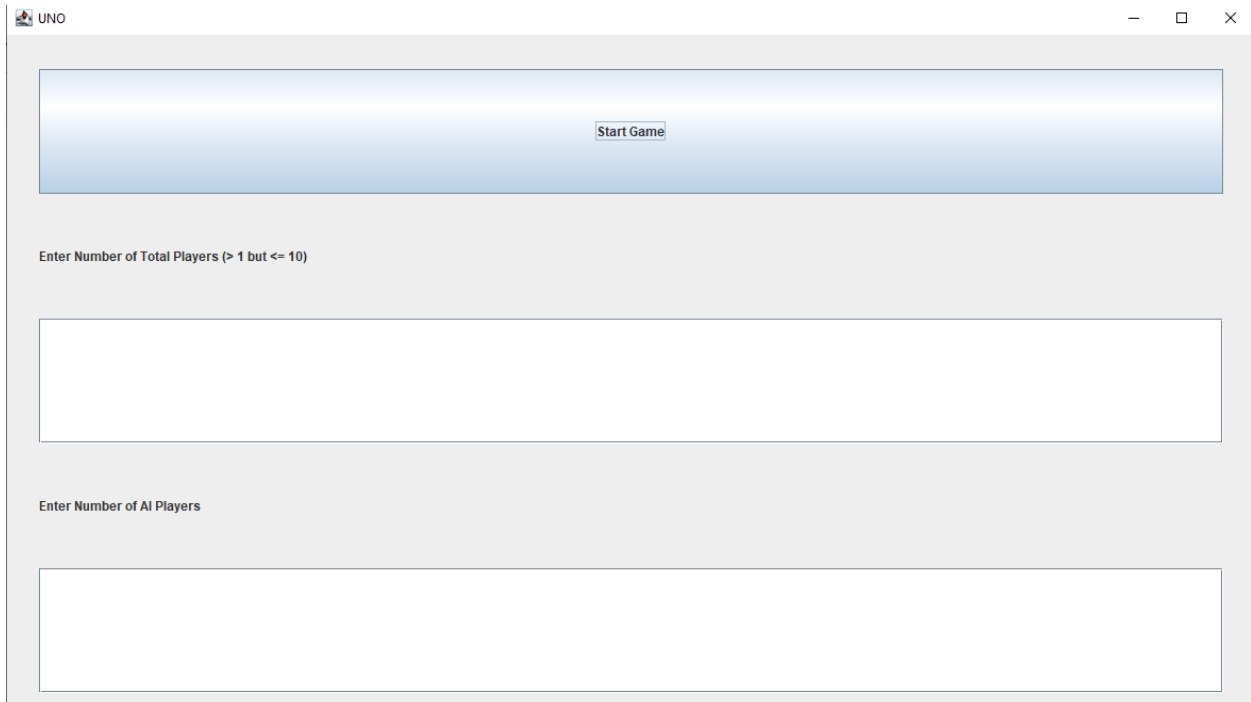
Table of Contents

Environment Setup

- **Java JDK - 16.0.2 (Swing, awt, lang, util)**
- **JUnit - 5.7.1**
- **Eclipse - 4.20.0**
- **Windows 10**

Test - UNO/Starting Frame

@Test 1.1 JTextField "(Enter a valid number of players > 1 but <= 10)"

- **User inputs a desired amount of players within a given bound.**

@Test 1.2 JTextField "(Enter Number of AI Players)"

- **User inputs a desired amount of AI players <= total number of players.**

Start Game

Enter Number of Players (> 1 but <= 10)

Message ✕

ⓘ **Invalid Number of Players. (Must be more than 1 but less than 10)**

OK

-1

Start Game

Enter Number of Total Players (> 1 but <= 10)

2

Message ✕

ⓘ Invalid Number of AI Players. (Must be <= Total Number of Players

OK

Enter Number of AI Players

3

@Test 1.1 Button "Start Game"

- **After entering a valid number of players and clicking this button the frame should now change to the Game In Progress Window.**
- **If an invalid number of players is given, an error message is shown and the game will not begin.**
- **If an invalid number of AI players is given, an error message is shown and the game will not begin.**

Test - Game In Progress

```
Game in Progress                                              —   □   ✕

Number of Players : 3

Current Player : 0

Current Player's Hand : [Blue - 0, Wild - Wild, Yellow - DrawTwo, Wild - Wild, Green - 1, Blue - 2, Red - 7]

Current Color : Red

Current Card of Discard Pile : Red - 2

Number of Cards Stacked : 0

                            Skip Turn

                          Hide/Show Hand

                           Draw a Card

                           Pay Penalty

                             Blue - 0

                            Wild - Wild

                         Yellow - DrawTwo

                            Wild - Wild

                             Green - 1

                             Blue - 2

                             Red - 7
```
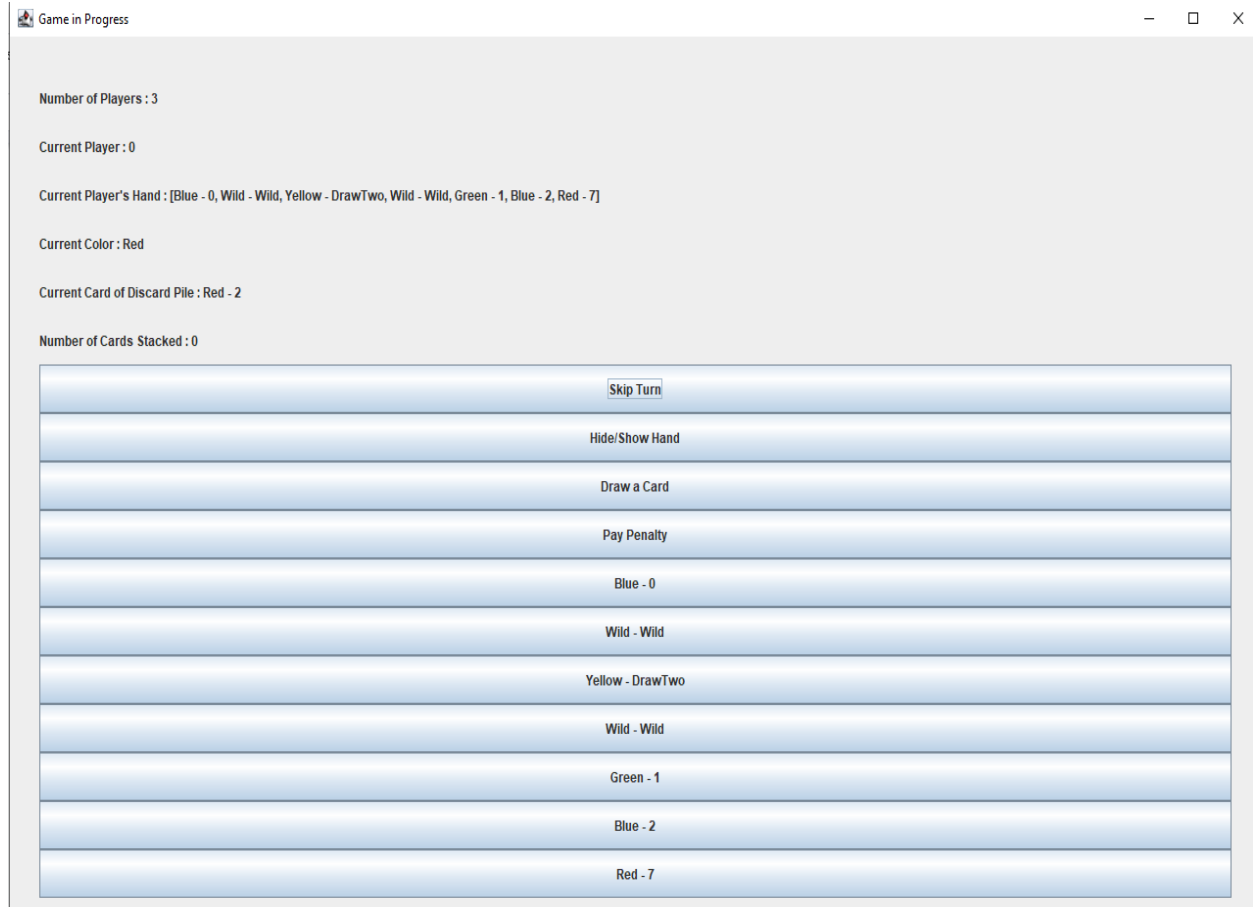
@Test 1.1 - JTextField "Enter Desired Color"

- **User inputs a color of choice and proceeds to click Button "Set Color"**

@Test 1.2 - Button "Set Color"

- **After a user clicks this button, the Current Color label should be updated to the color that was inputted.**

@Test 1.3 - Button "Skip Turn"

- **After a user clicks this button, the Current Player label should be updated to the next player, and the Current Player's Hand label should also correspond to the new Player's hand.**

@Test 1.4 - Button "Hide/Show Hand"

- **After a user clicks this button, if the Current Player's Hand label is visible, it should turn invisible and vice versa.**
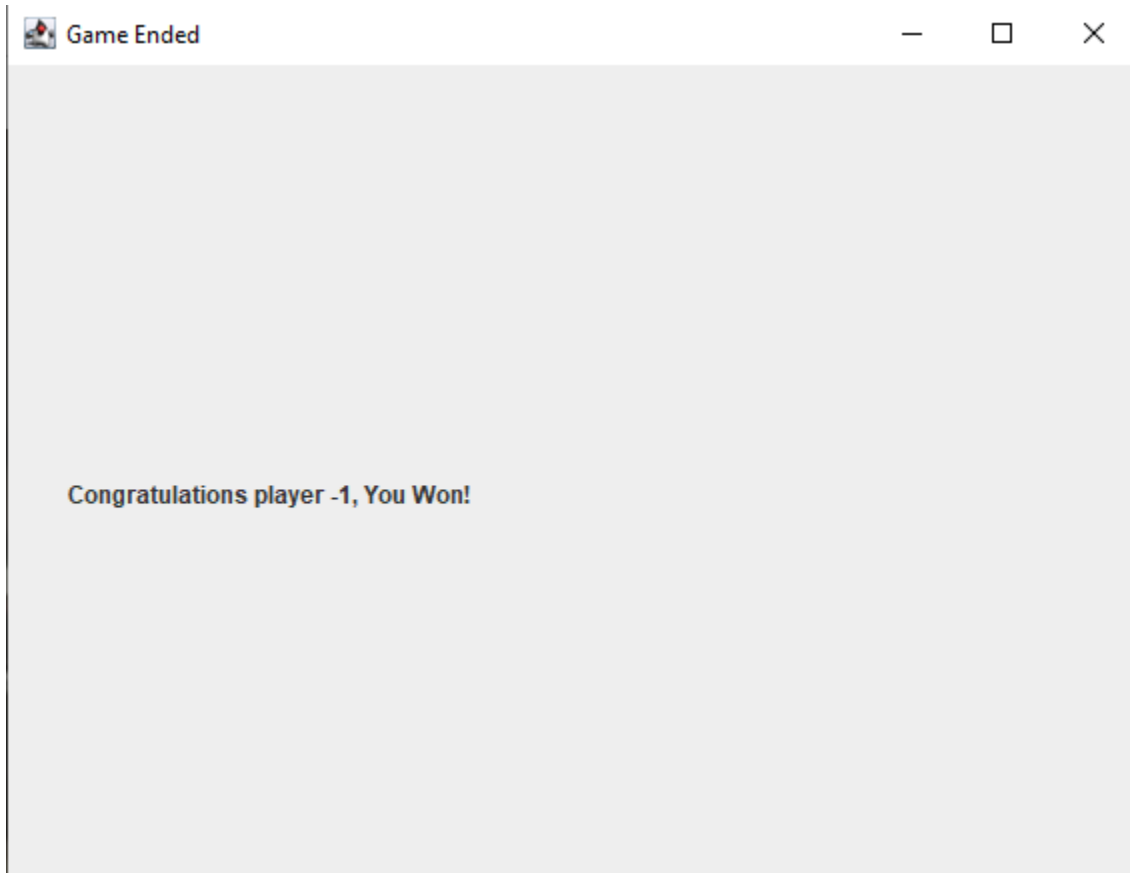
@Test 1.5 - Button "Pay Penalty"

- **After a user clicks this button, the Number of Stacked Cards will be added to their hand.**

@Test 1.6 - Buttons "Players Hand"
- **If a user clicks a valid card button, the card will be played and the proper effect should be enacted. If the card is not a valid move, no action is taken.**

Test - Game Ended

@Test 1.1 - Label "Congratulations player _, You Won!"
- **After the game has ended, the player whose hand was empty first should receive this message.**