

**Class:** Data Structures Section 001

**Assignment:** Homework 3

**Group members:** Zach Hammit, Dustin Seger

**Instructions:** Compile with default g++ settings for Windows. HW3.cpp contains the main, while the class files are Card and List. deckFunctions.h contains some helper functions as well and should be included

**Contributions (They are equitable):**

Zach

- Card Class and Main

Dustin

- Linked List stuff
- **Cleaning up main**

HW3 Tests

Test ID: 1

Priority: High

Module: HW3

Test Designer: Zach Hammitt

Test Executed by: Dustin Seger

Test Summary: Ensure that a war functions properly

Test Steps: Run HW3 and start a game. When you are asked to add a card to the side deck, just ignore it and choose no. This will cause a card to be played. Repeat these steps until a tie results. A tie will trigger a war. Record the amount of cards before and after the war.

Expected Results: After a war, a player will win at least 3 of the opponents cards (6 total). If the war ties again, the amount of opponents cards won will increase by 2 for each additional tie.

Actual result: The player had 25 cards at the start of a war, and the bot had 27. After the war was initiated, it resulted in a player win. After the war, the player had 28 cards and the bot 24.

Status: Passed

Test ID: 2

Priority: High

Module: HW3

Test Designer: Dustin Seger

Test Executed by: Zach Hammitt

Test Summary: Ensure that the side pile functions properly

Test Steps: Run HW3 and start a game. On the first 5 turns, you will add cards to your side deck. Attempt to add another card. Next turn, play a card from the side deck. Continue this until the side deck is empty.

Expected Results: After adding 5 cards to your side deck (this is displayed with your card count), the prompt to add another card to the side deck should not appear. Playing cards from the side deck should work as if 2 cards were played from the normal deck. If a card is played from the side deck, the count of cards in the side deck should go down by one, and if the player wins, the card should return to the main deck.

Actual result: On the first 5 turns when prompted to move a card to the side deck, yes was chosen. On the 6<sup>th</sup> turn, there was no option to move a card over. A card was played from the side deck this turn. The player card count prior to the round was 18 in main and 5 in the side. The bot had 29 cards. After the player won the round. The player had 20 cards in the main deck and 4 in the side. The bot had 28 cards.

Status: Passed