3110 Final Project Test Plan

What is included in our OUnit test suite:

- Testing for the 2 main functions in Card.ml, 'compare' and 'string of card'
 - Used black box testing
- Testing for functions in Hand.ml, 'add', 'string_of_hand', 'check_straight_flush', 'hand eval'
 - Used black box testing
- Testing for functions in Player.ml, 'new_user', 'none_player', 'new_bot', 'subtract_chips',
 'add chips', 'fold'
 - Used black box testing

What parts of the system were manually tested:

- Functions in game.ml
- These functions are related to continuing the flow of the game and printing to the terminal: 'player_bet', 'fold_player', 'print_game', 'deal_flop', 'deal_turn', and 'deal_river'
- These were all manually tested as it made more sense to test these through running the game as opposed to trying to set up correct test cases with OUnit
- Direct user interaction with the interface was tested manually by playing games of poker
- Further user facing functionality implemented in function in main.ml was tested manually

This testing approach demonstrates the correctness of our system through an extensive test suite which tests almost all the functions integral to our game's functionality. Those which were not tested but that were still integral to our program were tested manually through running the program and ensuring that all information was processed correctly, as well as displaying the correct information and following the rules of poker. We further tested the game by playing it through and immediately folding, which allows for the bots and other game logic to play many (hundreds) of iterations of poker quickly to catch more niche bugs or bugs that would crash the program.