- 1. As a user, I can register for the platform by using my email address and set up my profile (nickname, password) for quicker access to the application.
  - Test user attempts to login with invalid nickname (not in system, misspelled, etc.) (fail)
  - b. Test user creating new account with email address already registered (fail)
  - c. Test user creating new account with email address not already registered (pass)
  - d. Test user attempting to login with valid email address (pass)
  - e. Test after registering with email address, submitting nickname that already exists (fail under assumption that nickname is unique)
  - f. Test after registering with email address, submitting nickname that does not already exist (pass)
  - g. Test after registering with email address and nickname, creating password that meets complexity requirements (pass)
  - h. Test after registering with email address and nickname, creating password that doesn't meet complexity requirements (fail assuming we have complexity requirements for passwords)
  - i. Test logging in with invalid email/password combination (fail)
  - j. Test logging in with valid email/password combination (pass)
- 2. As a user, I can create a new match.
  - Test that it is not possible to create a new match with an invalid opponent (pass)
  - b. Test that creating a new match with a valid opponent is allowed (pass)
  - c. Test that if 'Cancel' is selected or the user some other way backs out, that the incomplete match is not saved and gets disregarded (pass)
  - d. Test that when 'Ok' is selected it will send the match request to the opponent. (pass)
  - e. Test that when 'Ok' is selected it brings up the game board and allows the inviter to make the first move. (pass)
- 3. As a user, I can invite another user to join the match.
  - a. Test that a user can invite another to join the match (pass)
  - b. Test that it is not possible to create a match with an invalid/blank opponent (pass)
- 4. As a user, I can send more than one invitation.
  - a. Test that a user tries to send multiple (>1) invitations without error (pass)

- 5. As a user, I can accept or reject an invitation, alerting the inviter.
  - a. Test that when a user gets a game invitation, accepting it brings them to the game and allows them to make a move if it is their turn (pass)
  - b. Test that when a user gets a game invitation, rejecting it brings throws the invitation away and they do not get brought to the game screen (pass)
  - c. Test that when a user accepts the game invitation, it alerts the inviter of the acceptance (pass)
  - d. Test that when a user rejects the game invitation, it alerts the inviter of the rejection (pass)
- 6. As a user, I can participate in multiple games at the same time.
  - a. Test that a user can have multiple games happening at the same time (pass)
- 7. As a user, I can forfeit from any game at any time.
  - a. Test that a user can hit the forfeit button and the game is ended (pass)
  - b. Test that if a user tries to forfeit, a confirmation window is shown asking the user if they are sure they want to forfeit (pass)
  - c. Test that when a user forfeits a game, it shows that they lost a game in their match history (pass)
- 8. As a user, I can unregister.
  - a. Test that the user has the option to unregister from the game (via button, etc.) (pass)
  - b. Test that when the user hits the unregister button, a warning/confirmation popup comes up asking if the user is sure they want to unregister (pass)
  - Test that hitting cancel on the confirmation popup returns the user to their settings page (or whatever page the unregister button resides) and does not do anything to their account (pass)
  - d. Test that hitting the OK button on the confirmation popup unregisters their account and signs them out of the application (pass)
  - e. Test that after unregistering and confirming unregistration, trying to sign in with the previous credentials will result in not being able to find user and prompting to register (pass)
- 9. As a user, I can view history statistics from previous games.
  - a. Test that after a game is finished, user can go to profile and history and view the correct statistics from that game (pass)

- b. Test that order of history is most recent first (pass)
- 10. As a user, I can view a user profile if registered.
  - a. Test that user is able to search username (partial or full match) and a list of matching users/profiles come up (pass)
  - b. Test that if a user selects on another users profile, they are able to view the user's general information (pass)
  - c. Test that a user doesn't have access to another user's private data (email address, password, etc) (pass)
- 11. As a user, I can make the first move if I create the match.
  - a. Test that if a user creates the match, they get to make the first move (pass)
- 12. As a user, I can return to a saved game.
  - a. Test that after a user can hit a back button to return to the list of active games (pass)
  - b. Test that if a user hits back to exit the game and then clicks the game to open it again, it returns with the saved most recent data (pass)
- 13. As a user, I can see the end result of a game I participate in.
  - a. Test that after a game ends, a notification is sent to both participants indicating the end results of the match (pass)
  - b. Test that if I am currently in the game, a banner/end result screen of some sort pops up with the results (pass)
- 14. As a user, I will be alerted when a user accepts/declines an invitation, when it is my turn, or a game I am participating in is over.
  - a. Test that when another user accepts a user's invitation, the user is alerted (pass)
  - b. Test that when another user declines an invitation, the user is alerted (pass)
  - c. Test that when the game state has changed and it is now a user's turn, the user is notified (pass)
  - d. Test that when a game a user is participating in ends, they get a notification (pass)
- 15. As a user, I want to have a lobby which shows me the actions I can perform.

- a. Test that a home/title screen is present (pass)
- b. Test that the home/title screen's button takes the user to their profile settings (pass)
- c. Test that the home/title screen's button takes the user to show pending invites (pass)
- d. Test that the home/title screen's button takes the user to show current games (pass)
- e. Test that the home/title screen's button takes the user to previous game history
- 16. As a user, I will be able to guit the game using a Quit button.
  - a. Test that the Quit button will guit from a game (pass)
  - b. Test that a confirmation popup appears asking the user if they are sure they want to quit and exit this game (pass)
- 17. As a user, I will be able to view a chess board and pieces when I'm in a match.
  - a. Test that in an active game, a chess board is shown (pass)
  - b. Test that in an active game, the chess board shows the pieces accurately (pass)
- 18. As a user, when I choose to move a piece the board will show where I can move the piece.
  - a. Test that when it is a users turn, they can click on one of their pieces and it will show the possible spots they can move it to (pass)
  - b. Test that if the user selects an opponent's piece, it will not show where that piece could move (pass)