1. **Register New user:** A user arrives at a registration page and is prompted to enter an email (which the system verifies is unique), a password, and a nickname (which the system verifies is unique). If successful, user is registered, otherwise user is prompted for information again.

Primary Actor: Unregistered User

<u>Stakeholders and Interests</u>: Unregistered User - wants to be able to register with an email, nickname & password.

<u>Preconditions</u>: Unregistered user is not registered.

Postconditions: Account is created with a unique email/nickname.

Success Scenario:

- 1. Unregistered user arrives on signup/login page
- 2. Unregistered user enters password and unique email and nickname
- 3. System verifies uniqueness of email and nickname and stores user information
- 4. Unregistered user becomes registered user

Extensions:

a.

- i. System fails to load signup/login page
- ii. User retries until successful or contacts system admins

b.

- i. Unregistered user enters non-unique email and nickname
- ii. System returns error message to user and prompts them to enter a different email/nickname
- iii. Process repeats until success
- 2. **Login:** A user arrives at a Login page where a registered user may enter their login name and password to enter the system.

Primary Actor: Registered User

<u>Stakeholders and Interests:</u> Registered user - wants to be able to login and perform the functions privileged a Registered user.

Preconditions: System only allows login or register new user.

<u>Postcondition:</u> Registered user is logged in and able to function as a player.

Success Scenarios:

- 1. User arrives at a login page.
- 2. User enters login info.
- 3. User is logged in.

Extensions:

- a. User is not directed to the landing page after he/she logs into the system
- b. Correct credentials do not work.
- c. System fails at any point
 - i. System restarts
- 3. **Deregister User:** A registered user can deregister from the system at any point. In which case, their games are deleted and any opponents they had at the time will receive

a notification of this. In addition, their email and nickname are freed up for use by other people wanting to register.

<u>Primary Actor</u>: Registered User

Stakeholders and Interests:

- Registered User wants to deregister from the system
- Other registered users in games with the primary actor want to only have playable games on their account
- Current unregistered users who will register in the future want to be able to use any email/nickname previously taken by the deregistered user

Preconditions:

• Registered User is registered with the system

Postconditions:

- Registered User becomes deregistered from system
- All games associated with registered user deleted from system
- All previous opponents notified of deleted games
- Previously registered user's nickname and password are freed up for future use

Success Scenario:

- 1. Registered user selects option to deregister their account
- 2. User receives email that they have been deregistered from the system
- Previously registered user's opponents receive in-game notification that their games with said user have been deleted and will no longer show up in their account

Extensions:

- a. System fails at any point
 - User either reloads the page until success or contacts system admins for help
- 4. **Create new game:** A registered user arrives on a landing page where they are given the option to create a new game. If they create a new game they then become a participant in the newly created game.

Primary Actor: Registered User

<u>Stakeholders and Interests</u>: Registered User - wants to be able to create a new game and be included in that game immediately

<u>Preconditions</u>: User has created an account and is logged into the system

<u>Postconditions</u>: A new game is started and the game is in its initial stage with the user as a player

Success Scenarios:

- 4. Registered user arrives at a main page.
- 5. Registered user clicks a button to start a new game.
- 6. A new game is created and that game is in its initial starting stage

Extensions:

d. User is not directed to the landing page after he/she logs into the system

- e. When the user clicks on the button to create a new game, a new game is not started
- f. System fails at any point
 - i. System restarts
- 5. **Invite players:** A registered user who has created a game is given the option to invite another registered users to their created game by using an email or nickname.

Primary Actor: Registered User

<u>Stakeholders and Interests</u>: Registered User - wants to be able to invite one or more players to the game that he/she just created.

<u>Preconditions</u>: User has logged into the system and successfully created a new game <u>Postconditions</u>: User requests other users to join the game and those users are added to that game

Success Scenarios:

1. After starting a game, the user is prompted to enter one or more users to join the game.

Extensions:

- a. System crashes at any point in this process
- b. System is restarted
- c. User is not presented with a window to request other users once the game is created
- d. User requests users that are not currently logged in.
- e. User is presented with an error message saying the users he/she requested are not logged into the system
- 6. **Choose Game:** A registered user has a personal dashboard where they may choose to play between any of their already created games.

Primary Actor: Registered User

<u>Stakeholders and Interests</u>: Registered User - wants to be able to see all of the games that he/she is currently a part of.

<u>Preconditions</u>: User is logged into the system and a part of one or more games

<u>Postconditions</u>: A window is present that shows each of the games a user is involved in. That user can click on any of these games to switch from one game to another.

Success Scenarios:

- 1. A window is located at the side of user's screen that shows which games the user is a player in.
- 2. The user is allowed to click on any of these games to change to that game.

Extensions:

- a. The system crashes at any point during this process
- b. System is restarted
- c. While in one or more games, the window is not present to the user

d. The user is not taken to another game once he/she has clicked on that game in the window.

currently involved in.

<u>Preconditions</u>: A user is currently involved in a game

Postconditions: That user is not involved in the game that they just quit out of

Success Scenarios:

- 1. A button is shown on a user's screen so that he/she can quit out of a game at any point.
- 2. Once a player clicks that button, a popup is presented asking the user if he/she is sure they want to quit the game.
- 3. If user clicks yes, they are returned to the landing page
- 4. If user clicks no, they stay in the current game

Extensions:

- a. System crashes at any point during this process
- b. System restarts
- c. Player is not taken out of a game when they decide to quit
- d. Player is taken out of a game that they did not want to quit
- 7. **Make Move** | The system allows users to only make moves in games that they are currently included in.

Primary Actor: Player

<u>Stakeholders and Interests</u>: Player - wants to make a move in a game in which he is a player.

Preconditions: Player is a participant in some game that has not yet ended.

Postconditions: Player is allowed to make a move in such a game.

Success Scenario:

1. Player sees on their dashboard that they can make a move in a game.

Extensions:

a.

- i. Player cannot make a move in a game in which they are included.
- ii. Player contacts system admin to resolve this issue.
- 8. **Quit Game:** Player may quit game at any time.

Primary Actor: Player

<u>Stakeholders and Interests</u>: Player - wants to quit game (possible forfeit) and no longer participate.

Preconditions: Player is a participant in game that is being quit.

<u>Postconditions</u>: Player is not a participant in that game, game counts as loss to quitting player and the game is ended for the other participant as a win.

9. **View Profiles**: A registered user may access their or another's profile from the dashboard, seeing their nickname and a history of their played games.

Primary Actor: Registered User

Stakeholders and Interests:

- Registered User wants to be able to see another player's game history
- Other Registered User wants to show off their game history

Preconditions:

- User is registered with the system
- Other users are registered with the system

Postconditions:

Registered users are able to see each other's game history

Success Scenario:

1. Registered user searches for another user by nickname or email, selects their profile and can view their game history

Extensions:

- a. Registered user searches for an email or nickname that is not registered with the system
- i. Screen displays text that informs user no account exists that is associated with the email/nickname Complete use case diagram...

