

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

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

Preconditions: 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

Stakeholders and Interests: 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.

Postcondition: 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.

Primary Actor: 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
3. 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
 - i. 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

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

Preconditions: User has created an account and is logged into the system

Postconditions: 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

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

Preconditions: User has logged into the system and successfully created a new game

Postconditions: 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

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

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

Postconditions: 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.

Preconditions: 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

Stakeholders and Interests: 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

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

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

Postconditions: 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

10. **Practice with AI:** A registered user may play a game against Artificial Intelligence.

Primary actor: Registered User

Stakeholders and interest:

- Registered User – wants to play against the computer

Preconditions:

- User is registered with the system

Postconditions:

- No changes made to Users history

Success Scenario:

1. Registered User can play a game with the computer.

