CAACC Use Cases

Use Case (ID: 1): Register to System

Scope: Hnefatafl game

Level: user goal

Primary Actor: Player

Stakeholders and Interests:

    - Player: Would like to register to system in order to play games with other

registered users. Would like process to be quick, with minimal information

required to enter.

Preconditions: Player has a valid email with which to register

Postconditions: Player is registered with system. Email + password combination can be used by player to

log back into the system. Nickname entered has saved correctly.

Main Success Scenario:

    1. Player arrives at registration screen to register for system.

    2. Player enters an email, password, and nickname to identify his/herself.

    3. Registration is successful assuming a unique username and player is able to create games, join

    games, etc.

Extensions:

    2a. Email is already taken by another player.

        1. Registration fails and player is notified to use another email for registration

    2b. Nickname is already taken by another player

        1. Registration fails and player is notified to use another nickname for registration

2c. Player enters an invalid email when registering

      1. Registration fails and player is notified to use a valid email for registration

2d. One or more fields is empty during registration

      1. Registration fails and player is prompted to fill in all fields.

2e. Password is invalid (SPECULATIVE) (too short, too common, etc.)

      1. Registration fails and player is prompted to choose a different password

4a. Player attempts to log back in with invalid email + password combination

      1. Log in fails, and player is notified that either the email or password is incorrect.

Special Requirements:

    - Connecting to server should be a relatively quick experience, exact time TBD

Frequency of Occurrence:

    - Several (> 10, < 100) times per hour

Use Case (ID: 2): Create a New Game

Scope: Hnefatafl game

Level: User Goal

Primary Actor: Player

Stakeholders and Interests:

Player: Needs the ability to create new games in order to play with other players

Preconditions: Player is registered and logged into the system

Postconditions: A new game of Hnefatafl is created, and the player who created it is a member of the game.

Main Success Scenario:

1. A registered player chooses "Create New Game"

2. The new game is created, and he/she is a part of it.

Extensions:

* If at any point, the player experiences a loss of connection, the game is removed from the pool of all games.

Frequency of Occurrence: Several times per hour (more than 10, less than 100)

Use Case (ID: 3): Run Game

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

· Player: Wants to play a responsive, intuitive implementation on Hnefatafl.

Preconditions: 2 players have joined the game, the host has started the game.

Success Guarantee: The king piece reaches a corner square or The king piece is captured.

Main Success Scenario:

1. System grants the attacking player the first turn.

2. On their turn, a player moves one of their pieces.

3. The system grants a turn to the other player.

   Steps 2-3 are repeated until a victory state in achieved

   4. The King piece reaches a corner square.

   5. A victory is granted to the defending player by the system.

   6. A loss is granted to the attacking player by the system.

Extensions:

   4.a The King piece is captured.
        1. A victory is granted to the attacking player by the system.
        2. A loss is granted to the defending player by the system.

   *.b At any time, a player quits from the game.
        1. A victory is granted to the remaining player by the system.
        2. A loss is granted to the disconnected player by the system.

Use Case (ID: 4): Invite Another User

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

· Player: Wants to be able to send an invitation to another player and launch a game.

Preconditions: Player One wanting to invite Player Two knows some information about Player Two as means to connect the two.

Success Guarantee: Both players wishing to play together are connected in a game.

Main Success Scenario:

1. A player sends an invite to another player
2. The invitee receives the invite.
3. The invitee accepts the invite.
4. The player which sent the invite is notified of the approval.
4. Both players join a game together.

Extensions:

3.a The invitee declines the invite.

1. Player sending the invite is notified of the decline.

Use Case (ID: 5): Quit Game

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

· Player: Wants to be able to quit a game of Hnefatafl at any time.

Preconditions: The player must be in a game of Hnefatafl with 0 or 1 other players.

Success Guarantee: The player is no longer in the game of Hnefatafl. The history of the player is updated.

Main Success Scenario:

1. Player is in a game of Hnefatafl.

2. The player can open the menu and click 'quit' the game.

3. The player is removed from the current game of Hnefatafl.

4. The players game history is updated.

5. The lobby will present a win to the remaining player

Extensions:
1. At any time the player may close the game client.
   a. The player force-quits the game application
   b. That player is removed from the current game of Hnefatafl.
   c. That players game history is updated.
   d. The lobby will present a win to the remaining player

1. At any time an opponent can quit the game
   a. The opponent player quits the game through the 'quit' button, or by force-quit.
   b. That opponent player is removed from the current game of Hnefatafl.
   c. That players game history is updated.
   d. The other player will stay in the game lobby.
   e. The lobby will present a win to the remaining player.

Use Case (ID: 6): Unregister

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

·   Player: Wants to be able to unregister from the game client at any time.

Preconditions: The player must have a valid registered account on the game client.

Success Guarantee: The player's account is no longer registered to the game client. The player's profile/nickname/email are deleted from the system. The player's profile is no longer visible to other users.

Main Success Scenario:

1. Player has a registered account on the game client.

2. The player can click 'unregister' from the main menu.

3. The player's account is no longer registered to the game client.

4. The player's account information is deleted from the system and is now available for re-use

5. The player's account is no longer visible to other users.

6. The game client will exit, and display the login screen.

Use Case (ID: 7): View Profile

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

·   Player: Wants to be able to view their profile and track information about their games.

Preconditions: User has created a profile (Use Case #1)

Success Guarantee: Player is able to view their profile and information about the games they have played.

Main Success Scenario:

    1. Player creates their profile

    2. Player plays a game or many

    3. A Player requesting access to their profile is granted by the system to view.

Extensions:

    1.a Player has basic profile created when they play their first game.

    2.b Without playing any games, a player requests their profile.

        1. Player is able to view basic profile.

    3.b Player requests access to another user's profile

        1. Player is registered and can view the other user's profile.

    1a. Player is not registered and cannot view the profile.

Use Case (ID: 8): View Game History

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

Player: Wants to be able to view a history of played matches and information relating to them.

Preconditions: The Player must be registered to the system (Use Case 1) and have played 1 or more games.

Success Guarantee: System contains data relating to the played matches that is accessible to the player.

Main Success Scenario:

1. Player begins a game of Hnefatafl.

2. Player leaves said game, by any means.

3. Game history is saved by the system.

Use Case (ID: 9): Login

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

Player: Once registered, would like to be able to login to their account.

Preconditions: The Player must be registered to the system (Use Case 1).

Success Guarantee: System advances a player to the game once credentials are verified.

Main Success Scenario:

1. Player registered to game attempts to login.

2. Player enters their correct credentials to the system.

3. Player is placed into the game.

Extensions:

1a. Player not registered to game attempts to login.

1. Player asked to create an account and enters information.

2. System creates an account for the player.

3. Player enters credentials to login

4. Player is placed into the game.

2a. Player enters incorrect credentials

1. Player is informed by the system about incorrect credentials

2. System prompts player to login again.

Use Case (ID: 10): Create a Game with AI

Scope: Hnefatafl Game

Primary Actor: Player

Stakeholders and Interests:

Player: Would like to play against an AI

Preconditions: The Player must be registered to the system (Use Case 1) and Logged in (Use Case 9).

Success Guarantee: System advances a player to the AI game.

Main Success Scenario:

1. Player invites the AI to start a game

2. Player is placed into the game against the AI.

3. Player makes a move

4. The AI makes a move automatically

Extensions:

1a. Player does not invite the correct AI user, but an invalid username.

1. Player alerted that the user was invalid

2. Player enters correct AI user and invites it to a game

3. Player is placed into the game.

1b. Player does not invite the correct AI user, but a valid username.

1. Player is entered into a game

2. Player makes a move

3. AI does not make any moves

4. Player quits this game

5. Player enters correct AI user and invites it to a game

6. Player is placed into the game

Updates 11/26/2017

- Added a use case for AI
- Some formatting changes