System Test Case Document

General Setup for Hnefatafl Game Application

Instructions:

- 1. Launch game via IDE by running Server.java and ClientApplication.java
- 2. Launch game via console using command line

java Server

java ClientApplication

Testcase 0

System: Hnefatafl Game Application

Test: Register to the system

Instructions:

- 1. Launch server and a client
- 2. Wait for login prompt
- 3. Click Register
- 4. Enter a host and port for connecting to a server
- 5. Enter an email, username, and password
- 6. Select register

Expected result:

- 1. Success window appears, letting one know the registration was successful
- 2. Redirected to login window

Alternative results:

- 1. After clicking register, a pop up window notifies of a non-unique name or email
- 2. After clicking register, a pop up window notifies of an invalid email

Testcase 1

System: Hnefatafl Game Application

Test: Logging in to system

- 1. Launch client application
- 2. Wait for login prompt

- 3. Enter a registered email and associated password (Host and port are assumed correct).
- 4. Select login button

- 1. User associated with the entered email is verified and the correct user is logged in.
- 2. Redirected to game window

Testcase 2

System: Hnefatafl Game Application

Test: View a profile and history

Instructions:

- 1. When logged in and on the game window
- 2. Enter a registered username in the User textbox
- 3. Select profile button

Expected result:

1. Pop up window loaded with history and profile

Alternative result:

1. Pop up window notifies the user that the username entered does not exist.

Testcase 3

System: Hnefatafl Game Application

Test: Inviting a user and starting a game

- 1. Launch application and login
- 2. Search a user in the User textbox
- 3. Click invite
- 4. In invitee application, select the user sending the invite in the invites section
- 5. Right click this invite and select accept

- 1. Both applications now display a game tab for the created game
- 2. Both applications contain the game in the Games section

Alternative Results:

- 1. Window notifies of an invalid user search
- 2. Invitation is declined on invitee end, window notifies the inviter

Testcase 4

System: Hnefatafl Game Application

Test: Making a neutral move

Instructions:

- 1. Begin a game following the earlier test cases
- 2. Wait until your turn (Yellow boxes around pieces)
- 3. Select a piece on the UI using the mouse
- 4. Release the mouse on the desired space.

Expected result:

- 1. Assuming this was a valid move, the selected piece should move to desired space.
- 2. Turns switch (no more yellow tiles around pieces)

Testcase 5

System: Hnefatafl Game Application

Test: Making a capturing (non-king) move

- 1. Begin a game
- 2. Wait until your turn
- 3. Select a piece on the UI using the mouse
- 4. Release the mouse on a tile that would "sandwich" an opponent's piece. (Two of your pieces on both sides (top/bottom or left/right) with opponent's piece in between)

- 1. Assuming this was a valid move, the selected piece should move to desired space.
- 2. "Sandwiched" piece will be removed from the board.
- 3. Turns switch

Testcase 6

System: Hnefatafl Game Application

Test: Making a king-capturing move

Instructions:

- 1. Begin a game
- 2. Wait until your turn
- 3. Select a piece on the UI using the mouse
- 4. Release the mouse on a tile that would "sandwich" an opponent's king on all 4 sides.

Expected result:

- 1. Assuming this was a valid move, the selected piece should move to desired space.
- 2. Opponent's king will be removed from the board.
- 3. A dialogue box will pop up informing the attacker that he/she has won. The game will be over and removed from the main menu.

Testcase 7

System: Hnefatafl Game Application

Test: Making a capturing move with "unique" tiles.

- 1. Begin a game
- 2. Wait until your turn
- 3. Select a piece on the UI using the mouse
- 4. Release the mouse on a space that would cause the opponent's piece to be "sandwiched" between your piece(s) and a "unique" tile (Corners and center).

- 1. Assuming this was a valid move, the selected piece should move to desired space.
- 2. Piece "sandwiched" is removed from the game.
- 3. If piece removed was the king, the game will end in victory and inform of such.

Testcase 8

System: Hnefatafl Game Application

Test: Defender win

Instructions:

- 1. Begin a game
- 2. Wait until your turn
- 3. Select a piece on the UI using the mouse
- 4. For the defender: release the king on any edge space

Expected result:

- 1. Assuming this was a valid move, the selected piece should move to desired space.
- 2. A dialogue box will appear, informing the defenders they have won, and the game will be over.

Testcase 9

System: Hnefatafl Game Application

Test: Quitting a game

Instructions:

- 1. Begin a game
- 2. In main menu, right click the desired game
- 3. Select Leave

Expected result:

- 1. Both players of the game will have the game removed from their menu.
- 2. The player who left will be given a loss, the other player will be given a win

Testcase 10

System: Hnefatafl Game Application

Test: Unregister from the system

Instructions:

- 1. Ensure logged into the server
- 2. Click Unregister
- 3. Enter password
- 4. Click Unregister

Expected result:

- 1. Assuming the password was correct, this player will be removed from the server and the application will redirect to login.
- 2. Logging in with the deleted account will not be successful.

Alternative results:

The password was incorrect, the system will notify the user of this.

Changes as of 11/10/2017:

- -Added more detail to setup, both for command line and IDE run situations
- -Added test case 0 for registering to the system
- -Added test cases 2 and 3 for newly implemented features
- -Added test case 10 for unregistering to the system
- -Changed the wording on multiple test cases to be more verbose.