#### **General Concept of Chad System**

1. If at any time the system fails, the system will restart and present users with the home page. All game data and user data will be saved and restored as it was before failure.

#### **Use Cases**

#### 1.) Register - Alber

Use Case Name	Register Account
Scope	Chad Game System
Level	User-goal
Primary Actor	Player
Stakeholders	Player: wants to register on the platform to play the game
Preconditions	Player should have a valid email id     Player should not be a registered member of the platform
Post conditions	Player has a new account and a username on the system
Main Flow	<ol> <li>Player selects register option</li> <li>Player inputs email</li> <li>Player inputs desired username</li> <li>Player inputs password</li> <li>Player selects create account option</li> </ol>
Alternative Flows	<ul> <li>1a. Player enters invalid format for any of the required fields</li> <li>1. Displays error</li> <li>2. System prompt the player to re-enter the required field</li> </ul>
Special Requirements	None

Technology and Data Variations	None
Frequency of Occurrence	Once per player

## 2.) Log in - Zach

Use Case Name	Log in
Scope	Chad game system
Level	User-goal
Primary Actor	Player
Stakeholders	Player: Wants to be able to be recognized by the system by logging in with his unique credentials.  Player needs to have access to the login portal.
Preconditions	Player accesses login page     Player trying to log in has an active, registered account
Postconditions	Player is logged into the system and now able to access system features.
Main Flow	Player inputs username and password     System validates account name exists and password is exactly correct     Home page is displayed
Alternative Flows	1a. Player forgot username or password:     1. Display error     2. Attempt to recover username or password

	2a. Username and password do not exactly match 1. Display error 2. User tries different password
Special Requirements	None
Technology and Data Variations	Verify username and password:  1. Username exists &  2. Password matches username
Frequency of Occurrence	Whenever login is attempted

#### 3.) Log out - Zach

Use Case Name	Log out
Scope	Chad game system
Level	User-goal
Primary Actor	Player
Stakeholders	Player: Wants to be able to log out of the system so his/her profile cannot be accessed by someone else.
Preconditions	Player is currently logged in
Postconditions	Player is logged out of the system and now unable to access system features.
Main Flow	<ol> <li>User selects log out option</li> <li>Log in portal is displayed</li> </ol>

Alternative Flows	None
Special Requirements	None
Technology and Data Variations	None
Frequency of Occurrence	Whenever logout is attempted

# 4.) Create new game - Shun

Use Case Name	Create new game
Scope	Chad game system
Level	User-goal
Primary Actor	Player
Stakeholders	Player: Registered user wants to play a new game  User should create a game that he or she can invite  players.
Preconditions	1. User is logged into the system
Post Conditions	The game is created and creator can select start game option.

User selects create new game option
2. User selects opponent from registered users list
2. The Chad system will create a board and initialize
the board
3. The Chad system will load the creator's log to store
the history
1a. Desired opponent isn't in registered users list
User selects different user or invites a new
player
None
None
Whenever player tries to create new game
None

#### 5.) Invite new player - Zach

Use Case Name	Invite new player
Scope	Chad game system
Level	User-goal
Primary Actor	Player

Stakeholders	Player who wants to play a game with someone who does not have a registered account.
	2. Invitee who does not have a registered account
	and wants to play
Preconditions	Invitee is not a registered user
	2. Invitee has a valid email
Postconditions	An email invitation has been sent to invitee.
Main Flow	Inviter will select invite new player option.
	2. Inviter inputs email of invitee.
	Inviter selects send invite option
	4. System sends email with link to register page to
	invitee
Alternative Flows	1a. Inviter inputs invalid email
	1. Display error
	2. System prompts user to input a valid email
Special Requirements	None
Technology and Data	Verify email:
Variations	Email is valid format
Frequency of Occurrence	Whenever a registered user wants to invite a new user

## 6.) Invite registered player - Martin

Use Case Name	Invite registered player
Scope	Chad game system
Level	User-goal
Primary actor	Player
Precondition(s)	Invitee is a registered user
Post-Condition(s)	A notification has been sent to invitee  User should be able to have his/her new account.
Main Flow	<ol> <li>Inviter will select invite new player option.</li> <li>Inviter selects invitee from list of registered users.</li> <li>System will redirect User to sign up page.</li> <li>User fills in required fields, and clicks 'Register' in order to proceed to next step.</li> <li>System validates the fields, register the user and redirect User to Login Screen.</li> <li>User can invite player by search from the online list.</li> </ol>
Alternative Flow	1. At step 3, if any of the information given by client is incorrect or incomplete, it will ask the client to enter it correctly. This in other use case
Special requirements	None
Technology and data variations	None

Frequency of occurrence	Each time a new game is created

## 7.) Accept/Reject invitation - Martin

Use Case Name	Register
Scope	Chad game system
Primary actor	Player
Precondition(s)	<ol> <li>User should not be a registered member of application</li> <li>User should have a valid email id</li> </ol>
Post-Condition(s)	User should be able to have his/her new account.
Main Flow	<ol> <li>User will click 'Create a new account'.</li> <li>System will redirect User to sign up page.</li> <li>Two steps for search and invite, receive and reply</li> <li>User fills in required fields, and clicks 'Register' in order to proceed to next step.</li> <li>System validates the fields, register the user and redirect User to Login Screen.</li> </ol>
Alternative Flow	<ol> <li>At step 3, if any of the information given by client is incorrect or incomplete, it will ask the client to enter it correctly.</li> <li>User fills in required fields, and clicks 'Register' in order to proceed to next step.</li> </ol>

Special Requirements	None
Technology and data variations	User should be able to have his/her new account.
Frequency of occurrence	Each time an invitation has been sent

## 8.) Quit game - Shun

Use Case Name	Quit game
Use Case No	8
Scope	Chad game system
Level	User-goal
Primary Actor	Players
Stakeholders	Players: who wants to quit the game
Pre-Condition(s)	Players should already joined a game, at least a creator
Main Flow	<ol> <li>Player quits game</li> <li>Game ends</li> <li>Game is recorded as a lose for the quitting player</li> <li>Both of the player will be informed that the game is ended.</li> </ol>
Alternative Flow	None

Technology and Data Variations	None
Post-Condition(s)	The game will quit. All the player will out of the game.
Special Requirements	None
Frequency of Occurrence	Whenever player decides to quits game

# 9.) Unregister account - Alber

Use Case Name	Unregister Account
Scope	Chad Game System
Level	User-goal
Primary Actor	Player
Stakeholders	Player: wants to unregister from the platform
Preconditions	<ol> <li>Player should be a registered member of the platform</li> <li>Player should be logged in</li> <li>User should have an account which is already registered to the system</li> <li>The user should be listed on the system</li> </ol>
Post conditions	Player should be able to unregister account

Main Flow	<ol> <li>Player unregisters his/her account</li> <li>System redirects the player to login page</li> <li>All the game log or information will be deleted or store into backup system if player want to recover his or her account</li> </ol>
Alternative Flows	None
Special Requirements	None
Technology and Data Variations	None
Frequency of Occurrence	Once per player

## 10.) View profile - Paul

Use Case Name	View Profile
Scope	Chad game system
Level	User-goal
Primary Actor	Player
Stakeholders	Player: Wants to see nickname and game history of themselves or another registered player.
Preconditions	Player doing the viewing is a registered player
Postconditions	Desired profile is displayed

Main Flow	<ol> <li>Player requests to see another player's profile</li> <li>System validates requested profile exists</li> <li>Profile is displayed. Profile contains nickname and game history</li> <li>Player can search player on the list which provide by system.</li> </ol>
Alternative Flows	<ul><li>1a. Requested Profile does not exist:</li><li>1. Display error</li><li>2a. An unexist account would not show on the list of registered players</li></ul>
Special Requirements	None
Technology and Data Variations	None
Frequency of Occurrence	Whenever requested by a user

## 11.) Start Game - Paul

Use Case Name	Start Game
Scope	Chad Game System
Level	User-goal
Primary Actor	Player
Stakeholders	Players: want to play the game
Preconditions	<ol> <li>Invitations have been sent</li> <li>Enough players have joined the game to play</li> </ol>

Postconditions	A game has been started and players can start to play the game
Main Flow	<ol> <li>Player is presented with Start Game button</li> <li>Player clicks Start Game</li> <li>Game board appears and player can take first turn</li> </ol>
Alternative Flows	The game doesn't have enough players to start     Game is not started and error message     displayed
Special Requirements	None
Technology and Data Variations	None
Frequency of Occurrence	As often as players wish to play

#### 12.) Play Game - Zach

Use Case Name	Play Game
Scope	Chad Game System
Level	User-goal
Primary Actor	Player
Stakeholders	Players: want to play the game
Preconditions	3. Game has been started
Postconditions	<ul><li>2. A player has won the game</li><li>3. Game history has been recorded</li></ul>
Main Flow	<ul><li>4. Players take turns making moves until a player wins the game</li><li>5. Record game history in both players' profiles</li><li>6. Option to play again is presented</li></ul>
Alternative Flows	<ul><li>1a. A player quits the game</li><li>2. Game ends</li><li>3. Record game as a loss for the quitting player, a win for the other player</li></ul>
Special Requirements	None
Technology and Data Variations	None
Frequency of Occurrence	As often as players wish to play

#### **Use case outline**

Use Case Name	
Scope	
Level	
Primary Actor	
Stakeholders	
Preconditions	
Postconditions	
Main Flow	
Alternative Flows	
Special Requirements	
Technology and Data Variations	
Frequency of Occurrence	