

# Chad

# Team WareWolves

A Simple and Elegant game of Tactical and Strategic depth

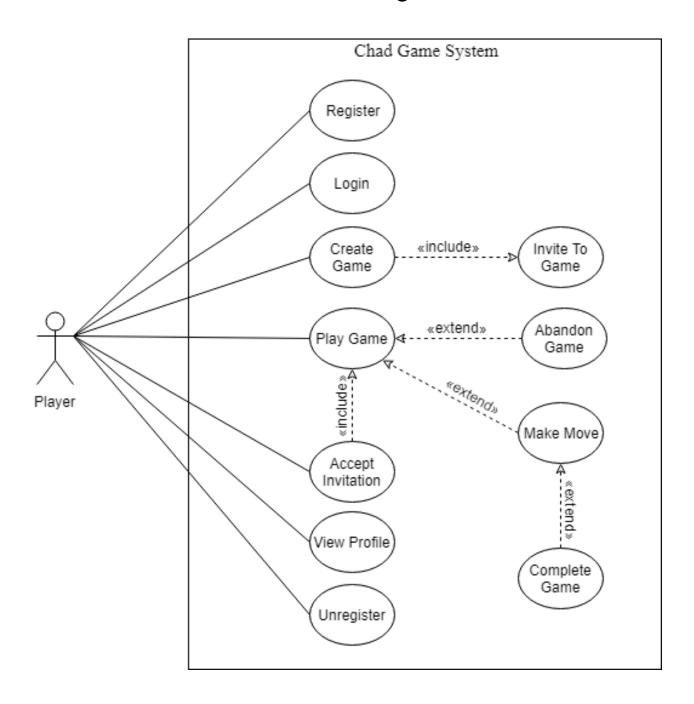


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# Use Case Diagram



# **Use Cases**

# Register

Use Case ID	P-01
Use case name	Register
Overview	The player can create an account in the system using an email, username, and password
Primary actors	Player
Secondary actors	None
Pre-conditions	The Player's email and/or username are not already in the system.
Main flow	<ol> <li>The player enters a username, email, and password</li> <li>System verifies user email exists</li> <li>System checks that email not already in use.</li> <li>System checks if the username is not already in use</li> <li>System makes new User record</li> <li>System sends confirmation email</li> <li>Player is logged in and receives confirmation email</li> </ol>
Post-conditions	The Player has an account in the system and is logged in.
Alternative flow 1	<ol> <li>If email does not exists.</li> <li>System error message displayed.</li> <li>Restart account creation.</li> </ol>
Alternative flow 2	<ol> <li>If email already in use by another user.</li> <li>System error message displayed</li> <li>Restart account creation</li> </ol>

Alternative flow 3	4.	If the username is already used by
		another user
	5.	System error message displayed
	6.	Restart account creation

# Login

Use Case ID	P-02
Use case name	Login
Overview	The player can log into their account using their email/username and password.
Primary actors	Player
Secondary actors	None
Pre-conditions	The player has an account
Main flow	<ol> <li>Player enters their email and password</li> <li>System checks if email and password are valid</li> <li>Player is logged into the system</li> </ol>
Post-conditions	Player is logged in to the system.
Alternative flow 1	<ol> <li>The password does not match the email provided</li> <li>Reject login attempt</li> <li>Prompt Player to re-enter their email and password.</li> </ol>
Alternative flow 2	<ol> <li>The email address is not registered in the system.</li> <li>Reject login attempt.</li> <li>Prompt Player to re-enter their email and password.</li> </ol>

#### Create Game

Use Case ID	P-03
Use case name	Create Game
Overview	The player creates a game
Primary actors	Player
Secondary actors	None
Pre-conditions	Player is logged into the system
Main flow	<ol> <li>The player creates a new game.</li> <li>Include(Invite to game (P-04))</li> </ol>
Post-conditions	A game has been created with the Player as player 1
Alternative flows	

#### Invite to Game

Use Case ID	P-04
Use case name	Invite to Game
Overview	The player can invite other users to a match
Primary actors	Player
Secondary actors	None
Pre-conditions	<ul><li>Player is logged into the system</li><li>Player has created a game</li><li>Other users exist</li></ul>
Main flow	<ol> <li>The player enters other Players' username to invite.</li> <li>The system sends an invitation to the other player</li> </ol>
Post-conditions	Other Players have been invited to the game
Alternative flows	<ol> <li>The entered username is not a inuse Username in the system.</li> <li>Prompt the user to enter another player's username</li> </ol>

# Accept Invitation

Use Case ID	P-06
Use case name	Accept Invitation
Overview	A player who has been invited to a game can accept the invitation and join the game.
Primary actors	Player
Secondary actors	None
Pre-conditions	<ul><li>Player is logged into the system</li><li>Player has been invited to a game</li><li>Invite has not been canceled</li></ul>
Main flow	<ol> <li>Player accepts the invitation</li> <li>Game is added to the players active games</li> <li>System adds both Players to the game and sets up the board.</li> <li>The System informs the starting Player that it is their turn.</li> <li>Include (Play Game(P-05))</li> </ol>
Post-conditions	Player has successfully joined the game.
Alternative flows	Player rejects the invitation

## Play Game

Use Case ID	P-05
Use case name	Play Game
Overview	Two players actively make moves and play the game Chad.
Primary actors	Player
Secondary actors	Another Player
Pre-conditions	<ul><li>Player is logged into the system.</li><li>Player is part of an active game.</li></ul>
Main flow	<ol> <li>Player selects an active game.</li> <li>Player is shown the current state of the game</li> <li>System indicates that it is Player's turn Extension Point (Make Move(P-07))</li> </ol>
Post-conditions	Game state has been recorded
Alternative flows	Player chooses to abandon the game.     Extension Point (Abandon Game(P-09)

#### Make Move

Use Case ID	P-07
Extension use case	Make Move
Overview	The player can make moves in an active game.
Primary actors	Player
Secondary actors	System
Pre-conditions	<ul> <li>Player is logged into the system</li> <li>Player is part of an active game</li> <li>It is the Player's turn in an active game</li> </ul>
Main flow	<ol> <li>Player selects one of their pieces.</li> <li>Player is shown a preview of valid moves for that piece</li> <li>Player selects a space of a valid move for the piece.</li> <li>Player submits the move</li> <li>Extension point (Complete Game(P-08))</li> <li>The system registers the move</li> <li>The system informs the other Player that it is their turn</li> </ol>
Post-conditions	The game has been updated with the Player's new move, and it is now the other Player's turn.
Alternative flow 1	<ul><li>3. Player chooses to undo the move</li><li>4. Go back to 2.</li></ul>
Alternative flow 2	<ol> <li>Player selects an opponent's piece</li> <li>The system shows no valid moves</li> <li>Go back to 1</li> </ol>
Alternative flow 3	<ul><li>3. Player chooses an invalid move</li><li>4. The system notifies Player it is an invalid move</li><li>5. Go back to 2.</li></ul>

#### Complete Game

Use Case ID	P-08
Extension use case	Complete Game
Overview	The game is completed and the results of the game are recorded
Primary actors	Player
Secondary actors	None
Pre-conditions	<ul> <li>Player is logged in</li> <li>Player is playing a game</li> <li>Player has a checkmate or there is a tie state</li> </ul>
Main flow	<ol> <li>The system ends the active game</li> <li>If a Player had a checkmate</li> <li>Record a win on the winning Player's profile.</li> <li>Record a loss on the losing Player's profile.</li> </ol>
Post-conditions	<ul><li>Game is no longer active</li><li>Game result is recorded</li></ul>
Alternative flows	The game ended at a draw     Record a draw on both Players'     profiles

#### Abandon Game

Use Case ID	P-09
Extension use case	Abandon game
Overview	A player can quit a game that is in progress
Primary actors	Player
Secondary actors	None
Pre-conditions	<ul><li>Player is logged into the system</li><li>Player is part of an active game</li></ul>
Main flow	<ol> <li>Player selects the game they want to leave.</li> <li>Player confirms their choice to abandon the game.</li> <li>The game is marked as abandoned in the player's stats</li> </ol>
Post-conditions	Player has left the game.
Alternative flows	<ol> <li>Player cancels the abandon operation.</li> <li>The game is not ended.</li> </ol>

# Unregister

Use Case ID	P-10
Use case name	Unregister
Overview	The user can unregister from the system
Primary actors	Player
Secondary actors	None
Pre-conditions	Player is logged into the system
Main flow	<ol> <li>Player selects unregister</li> <li>Player confirms they want to unregister.</li> <li>The system sends an email to the saved Player email address as a receipt of unregistration.</li> <li>The player's email, password, username, and game records are removed from the system records.</li> </ol>
Post-conditions	Player no longer has an account in the system.
Alternative flows	<ol> <li>Player cancels the unregistration.</li> <li>Player is returned to previous view.</li> </ol>

#### View Profile

Use Case ID	P-11
Use case name	View Profile
Overview	A user can view a user profile
Primary actors	Player
Secondary actors	None
Pre-conditions	Player is logged into the system
Main flow	<ol> <li>Player searches for a username.</li> <li>Player selects a username.</li> <li>The player views information about the selected user and their previously played games.</li> </ol>
Post-conditions	Player is viewing a users profile
Alternative flows	Player selects own profile     Player views statistics of their previously played games.