

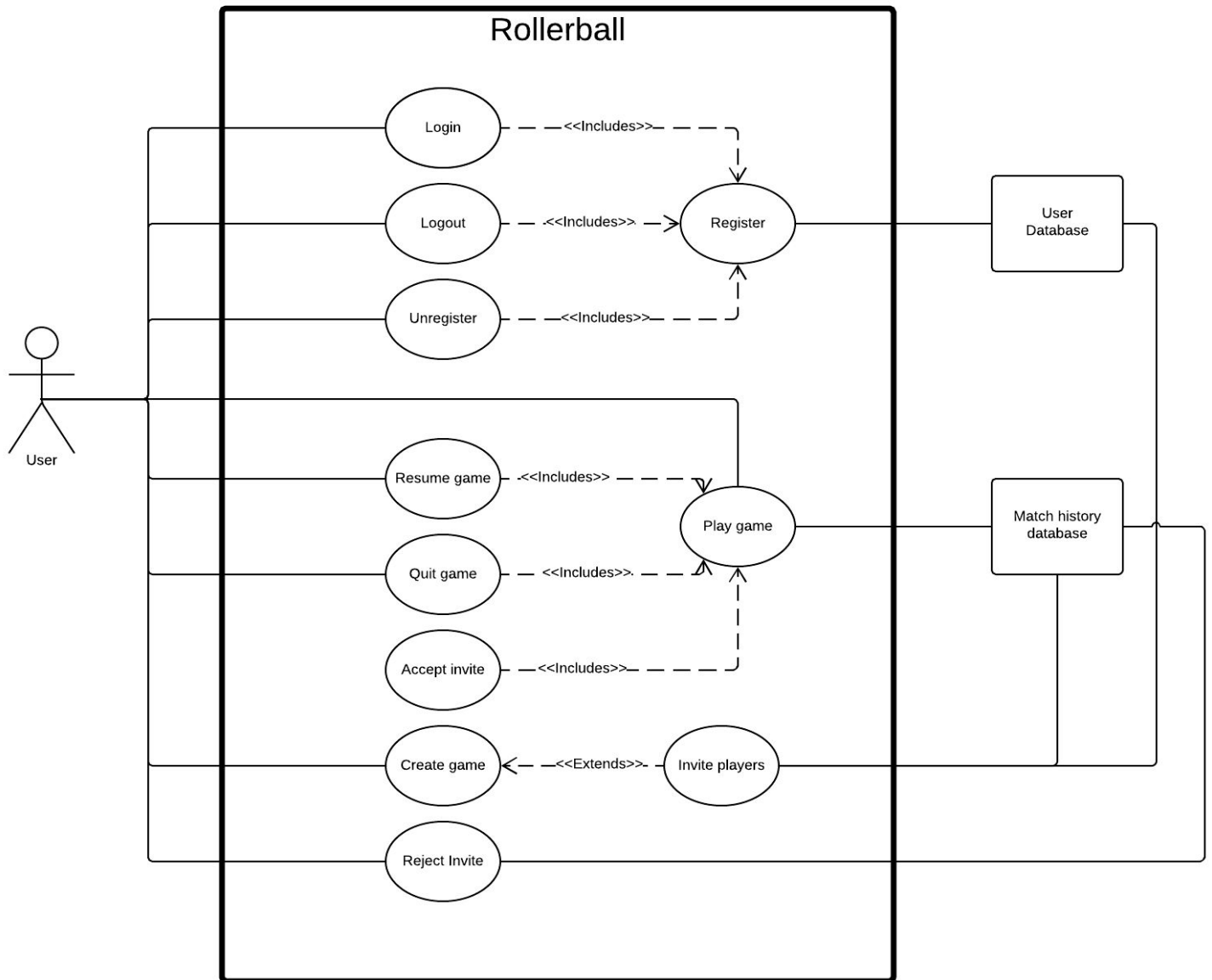
# Rollerball Use Case Document

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## Use case diagram



## Logging in

Use case id:	1
Use case name:	Login
Brief description:	The player logs into the system.
Type:	User Goal
Primary actors:	Player
Secondary actors:	User database
Pre-conditions:	1. Must be registered
Main flow:	1. Player enters username and password.
Alternate flow:	1.a Player does not exist in database 1. Extension point Register 1.b Player enters incorrect username or password 1. Restart Login process.
Post-conditions:	1. The player is now logged in

## Logging out

Use case id:	2
Use case name:	Logout
Brief description:	The player logs out of the system
Type:	User Goal
Primary actors:	Player
Secondary actors:	User database
Pre-conditions:	1.The player must be logged in
Main flow:	1. The player will choose to logout.
Alternate flow:	none
Post-conditions:	1. The player will be logged out of the system

## Unregistering

Use case id:	3
Use case name:	Unregister
Brief description:	The user removes registration from user database
Type:	User Goal
Primary actors:	Player
Secondary actors:	User database
Pre-conditions:	1. Player is currently registered in the database
Main flow:	1. Player chooses to unregister account 2. User database is updated removes player details
Alternate flow:	1.a. User declines to unregister during the process b. User database is not updated to remove player details c. Unregister process is cancelled
Post-conditions:	1. Player is unregistered and account details are no longer in the user database.

## Registering

Use case id:	4
Use case name:	Register
Brief description:	The player creates an account with a unique username, email, and password.
Type:	User Goal
Primary actors:	Player
Secondary actors:	User database
Pre-conditions:	<ol style="list-style-type: none"><li>1. Username must be unique.</li><li>2. Email must be unique.</li><li>3. Password must fulfill requirements TBD at a later time.</li></ol>
Main flow:	<ol style="list-style-type: none"><li>1. Player provides email, username, and password.</li><li>2. System checks for unique username and email.</li><li>3. System updates User database.</li><li>4. Player is registered</li></ol>
Alternate flow:	<ol style="list-style-type: none"><li>2.a. Username/Email is not unique.</li><li>b. Restart registration process</li></ol>
Post-conditions:	<ol style="list-style-type: none"><li>1. Player is registered</li><li>2. Player's login information is stored in the user database.</li></ol>

## Resuming a game

Use case id:	5
Use case name:	Resume game
Brief description:	The player may resume a game that has already been started.
Type:	User Goal
Primary actors:	Player
Secondary actors:	Match History Database
Pre-conditions:	1. A game must already be started 2. A player must be logged in
Main flow:	1. The player will Resume in the game lobby
Alternate flow:	1. The game does not exist
Post-conditions:	1. The game will be resumed



## Quitting a game

Use case id:	6
Use case name:	Quit game
Brief description:	Quit the game that the player is currently in.
Type:	User Goal
Primary actors:	Player
Secondary actors:	Match history database
Pre-conditions:	1. The player is in a game
Main flow:	1. The player chooses to quit the game 2. The match history database is updated to show that the player left 2. The other player is notified that the player quit
Alternate flow:	1. The player decides not to quit the game
Post-conditions:	1. The player can no longer play the game 2. The match history database shows that the player quit 3. The other player has been notified that the player quit

## Accepting a game invite

Use case id:	7
Use case name:	Accept Invite
Brief description:	A player will be able to accept an invite sent from another player
Type:	User Goal
Primary actors:	Player
Secondary actors:	None
Pre-conditions:	1. The player must be logged in 2. The invite must not be accepted by anyone else
Main flow:	1. The player will Accept Invite in the game lobby
Alternate flow:	1. The game was not accepted by the player a. Use case reject game.
Post-conditions:	1. The game was accepted 2. The game is started

## Playing the game

Use case id:	8
Use case name:	Play game
Brief description:	Two players take turns taking actions. The game ends when a win condition is met for one of the players
Type:	User Goal
Primary actors:	Player
Secondary actors:	User database, Match history database
Pre-conditions:	Both players have joined a game against each other
Main flow:	<ol style="list-style-type: none"><li>1. Player takes a move</li><li>2. System checks impact of the move<ol style="list-style-type: none"><li>a. Win condition is not met, next players turn, repeat step 1 and 2</li><li>b. Win condition is met</li></ol></li><li>3. Game ends</li></ol>
Alternate flow:	<ol style="list-style-type: none"><li>1. During player's move, player leaves the game</li><li>1. During player's move, other player leaves the game</li></ol>
Post-conditions:	The game is over and the Match history database records the results

## Creating a new game

Use case id:	9
Use case name:	Create game
Brief description:	Create a new rollerball game that the player can invite others to.
Type:	User Goal
Primary actors:	Player
Secondary actors:	None
Pre-conditions:	1. Player must be registered.
Main flow:	1. Player chooses to create game. 2. Extension point Invite players
Alternate flow:	1. Player cancels creation of game. a. Created game is erased.
Post-conditions:	1. A new game is created that invited players can join.

## Inviting players to a new game

Use case id:	10
Extension use case:	Invite players
Brief description:	When a match is created, player may invite other players to join.
Type:	User Goal
Primary actors:	Player
Secondary actors:	User database
Pre-conditions:	1. Player has created a new game. 2. Player is logged in. 3. Invited player(s) exists.
Main flow:	1. Player selects one or more players to invite to play. 2. Invite is sent to other players immediately.
Alternate flow:	1. Player cancels create game. a. Created game is erased.
Post-conditions:	1. A new game has been created with invites sent to other players.

## Rejecting a game invite

Use case id:	11
Use case name:	Reject Invite
Brief description:	Player rejects the invite from another user to play the game
Type:	User Goal
Primary actors:	Player
Secondary actors:	None
Pre-conditions:	1. Player must have been invited.
Main flow:	1. Player gets new game invite notification. 2. Player rejects the invite. 3. Player that sent the invite is notified of rejection.
Alternate flow:	2.a. Player ignores the game invite. 2.b. Player accepts game invite. 1. Use case Accept Invite.
Post-conditions:	1. Invitation has been rejected