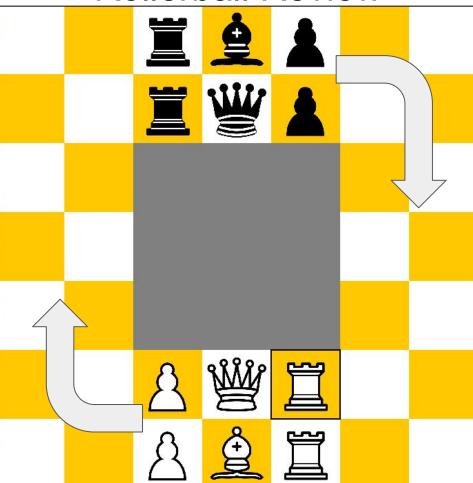


# SOGGY Rollerball

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## Rollerball Review



### Recap

- 7x7 Game Board with 3x3 hole in the center
- Pieces for each color
  - 1 King
  - 1 Bishop
  - o 2 Rooks
  - o 2 Pawns
    - If a pawn reaches the other teams starting locations of their pawns, they can be promoted to a Bishop or Rook.
- Player wins by putting other teams King in checkmate.

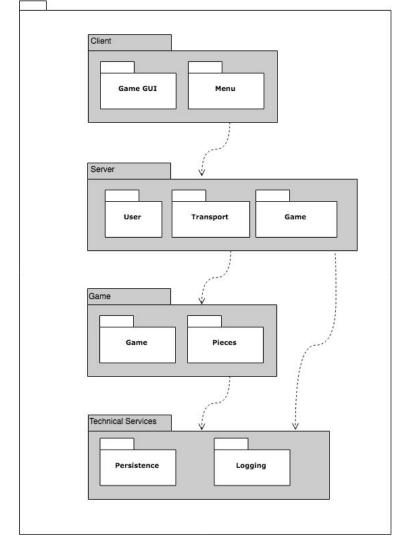
## New Use Case: Playing with an Al Bot

Use case id:	12						
Use case name:	Playing with an Al Bot						
Brief description:	Player play a game with an AI instead of another Player						
Type:	User Goal						
Primary actors:	Player						
Secondary actors:	None						
Pre-conditions:	None						
Main flow:	1. Player starts game with Al						
Alternate flow:	Player wants to play game with other player						
Post-conditions:	1. Player is able to play with Al						

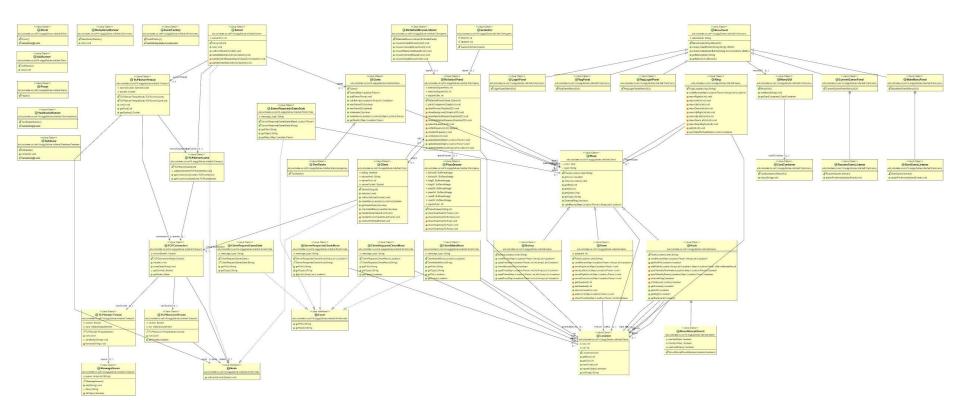
## **Traceability Matrix**

	1_LOGIN	2_LOGOUT	3_UNREGISTER	4_REGISTER	5_RESUME_GAME	6_QUIT_GAME	7_ACCEPT_INVITE	8_PLAY_GAME	9_CREATE_GAME	10_INVITE_PLAYERS	11_REJECT_INVITE	12_PLAYING_AI
gameGUI	x			X	х	×		x				x
RollerballPanel	×			×	х	x		x				x
CreateInvitePanel	X			X				6. 6.	x	X		
LoginPanel	X			x								
MainMenuPanel	×	х	x	x	x		x	x	x	x		x
MenuGUI	X	X	x	x	x		x	x	x	x		x
PendingInvitesPanel	×			×			x	x		x	x	
RegLoginPanel	X			X								
RegPanel				X								
Database	x	х	x	x	х	×	x	x	x	x	x	x
Bishop					х	X		x	x			x
Game					х	x		x	x			х
King					x	x		x	x			x
Location					х	x		x	х			x
Pawn					x	x		x	x			х
Piece					х	x		x	x			x
Rook		8			x	x		x	x			х
GameCache	X			X	x	x	x	X	x	x	X	х
Invite	x			x					x	x		
Server	X	х	x	x	х	x	x	x	x	x	x	x
User	X	Х	х	x	х	X	x	x	x	x	x	x
Transport	X	X	x	×	x	x	X	x	x	x	X	х
ClientMakeMove	X			X				х				x
ClientRequestGameState	X			x	х	x		x	x			x
ClientRequestsCheckMove	x			x				x				х
ClientRespondsInvite	x			x			x	-		x	x	
ClientSendsUnregister	X		х	x							į	
ClientSendsInvite	X			X					x	x		
ClientSendsLogin	X			X								
ClientSendsLogout	x	x		х								
ClientSendsRefresh	х				х			х				x
ClientSendsRegistration				x								

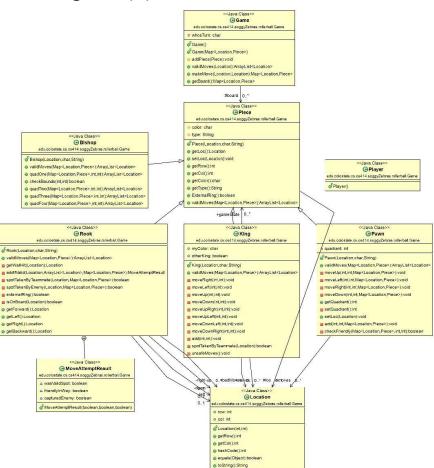
# Package Diagram

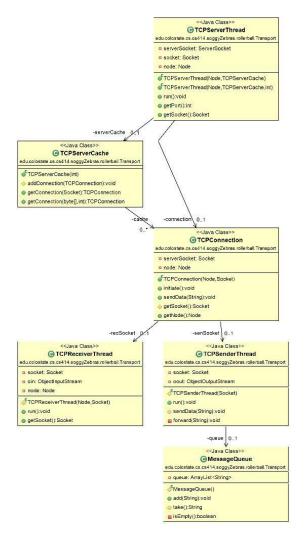


#### Class Diagram(s)

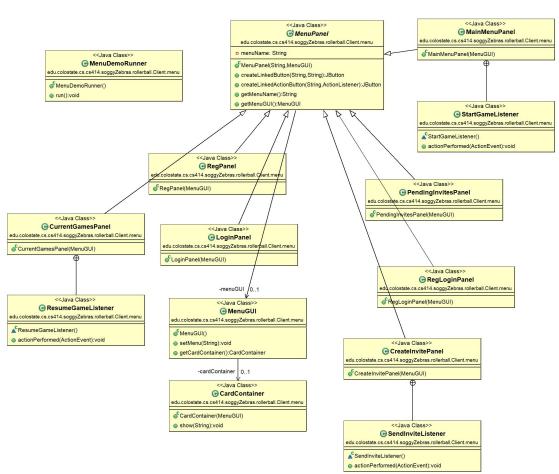


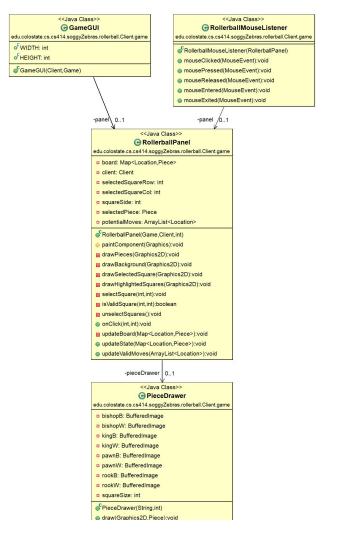
#### Class Diagram(s)



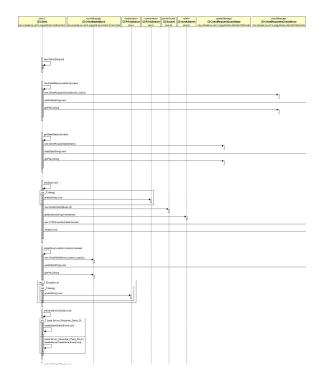


#### Class Diagram(s)



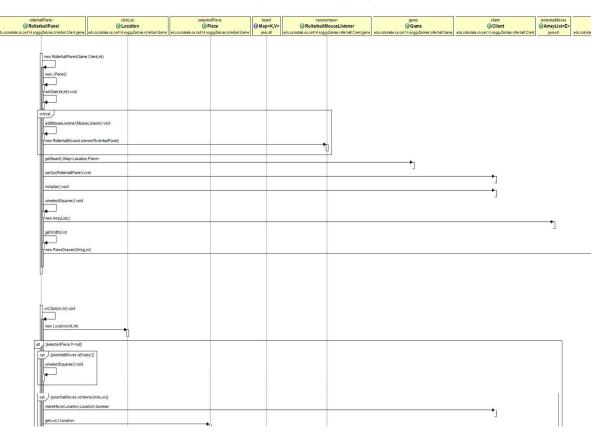


# Sequence Diagram(s)

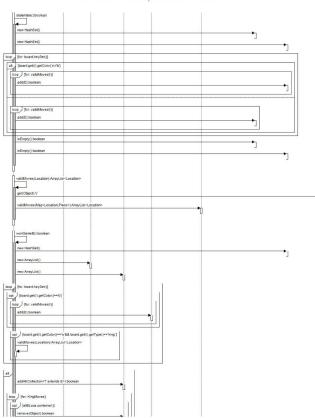




## Sequence Diagram(s)







## Challenges and Lessons learned

- Object Serializability
- Databases
- Code Design
- Time Conflicts
- GUI programming
- Migration from single instance to distributed system