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|---|-------------------|--------------------|---------------|----------------------|-------------|----------------|------------------------|-----------------|--|--|
| USE CASES MET: 10/10 | | | | | | | | | | |
| GAME CLASSES | | | | | | | | | | |
| | Board | Color | FinishedMatch | Match | MatchStatus | Piece | Tile | TileType | | |
| Use Case (ID: 1) - Register to System | | | | | | | | | | |
| Use Case (ID: 2) - Create a New Game | | | | | | | | | | |
| Use Case (ID: 3) - Run Game | X | X | X | X | X | X | X | X | | |
| Use Case (ID: 4) - Invite Another User | | | | | | | | | | |
| Use Case (ID: 5) - Quit Game | | | | | | | | | | |
| Use Case (ID: 6) - Unregister | | | | | | | | | | |
| Use Case (ID: 7) - View Profile | | | | | | | | | | |
| Use Case (ID: 8) - View Game History | | | | | | | | | | |
| Use Case (ID: 9) - Login | | | | | | | | | | |
| Use Case (ID: 10) - Create Game with AI | | | | | | | | | | |
| AI CLASSES | | | | | | | | | | |
| | AI | AIClient | Coordinate | | | | | | | |
| Use Case (ID: 1) - Register to System | | | | | | | | | | |
| Use Case (ID: 2) - Create a New Game | | | | | | | | | | |
| Use Case (ID: 3) - Run Game | | | | | | | | | | |
| Use Case (ID: 4) - Invite Another User | | | | | | | | | | |
| Use Case (ID: 5) - Quit Game | | | | | | | | | | |
| Use Case (ID: 6) - Unregister | | | | | | | | | | |
| Use Case (ID: 7) - View Profile | | | | | | | | | | |
| Use Case (ID: 8) - View Game History | | | | | | | | | | |
| Use Case (ID: 9) - Login | | | | | | | | | | |
| Use Case (ID: 10) - Create Game with AI | X | X | X | | | | | | | |
| COMMON CLASSES | | | | | | | | | | |
| | Event | Invitation | Profile | UserID | | | | | | |
| Use Case (ID: 1) - Register to System | X | | | X | | | | | | |
| Use Case (ID: 2) - Create a New Game | X | | | X | | | | | | |
| Use Case (ID: 3) - Run Game | X | | | X | | | | | | |
| Use Case (ID: 4) - Invite Another User | X | X | | X | | | | | | |
| Use Case (ID: 5) - Quit Game | X | | | X | | | | | | |
| Use Case (ID: 6) - Unregister | X | | | X | | | | | | |
| Use Case (ID: 7) - View Profile | X | | X | X | | | | | | |
| Use Case (ID: 8) - View Game History | X | | X | X | | | | | | |
| Use Case (ID: 9) - Login | X | | | X | | | | | | |
| Use Case (ID: 10) - Create Game with AI | X | | | | | | | | | |
| GUI CLASSES | | | | | | | | | | |
| | ClientApplication | ClientController | GameListCell | GameListCellListener | GameTab | InviteListCell | InviteListCellListener | LoginController | | |
| Use Case (ID: 1) - Register to System | X | X | | | | | | | | |
| Use Case (ID: 2) - Create a New Game | X | X | X | X | X | | | | | |
| Use Case (ID: 3) - Run Game | X | X | X | X | X | | | | | |
| Use Case (ID: 4) - Invite Another User | X | X | | | | X | X | | | |
| Use Case (ID: 5) - Quit Game | X | X | X | X | X | | | | | |
| Use Case (ID: 6) - Unregister | X | X | | | | | | | | |
| Use Case (ID: 7) - View Profile | X | X | | | | | | | | |
| Use Case (ID: 8) - View Game History | X | X | | | | | | | | |
| Use Case (ID: 9) - Login | X | X | | | | | | X | | |
| Use Case (ID: 10) - Create Game with AI | X | X | X | X | X | X | X | | | |
| | ProfileController | RegisterController | PieceGUI | PieceTypeGUI | TileGUI | | | | | |
| Use Case (ID: 1) - Register to System | | X | | | | | | | | |

| | | | | | | | | | | |
|---|-----------------------|------------------------|---------------------|----------------------|------------------------|------------------------|---------------------|---------------------|------------------|------------------|
| Use Case (ID: 2) - Create a New Game | | | X | X | X | | | | | |
| Use Case (ID: 3) - Run Game | | | X | X | X | | | | | |
| Use Case (ID: 4) - Invite Another User | | | | | | | | | | |
| Use Case (ID: 5) - Quit Game | | | | | | | | | | |
| Use Case (ID: 6) - Unregister | | X | | | | | | | | |
| Use Case (ID: 7) - View Profile | X | | | | | | | | | |
| Use Case (ID: 8) - View Game History | X | | | | | | | | | |
| Use Case (ID: 9) - Login | | | | | | | | | | |
| Use Case (ID: 10) - Create Game with AI | | | | | | | | | | |
| EVENT CLASSES | | | | | | | | | | |
| | ClientDisconnectEvent | ConnectAcceptedEvent | HeartbeatEvent | AcceptInviteEvent | DeclineInviteEvent | InviteAcceptedEvent | InviteDeclinedEvent | InviteReceivedEvent | InviteUserEvent | LoginFailedEvent |
| Use Case (ID: 1) - Register to System | X | X | X | | | | | | | |
| Use Case (ID: 2) - Create a New Game | X | X | X | | | | | | | |
| Use Case (ID: 3) - Run Game | X | X | X | | | | | | | |
| Use Case (ID: 4) - Invite Another User | X | X | X | X | X | X | X | X | X | |
| Use Case (ID: 5) - Quit Game | X | X | X | | | | | | | |
| Use Case (ID: 6) - Unregister | X | X | X | | | | | | | |
| Use Case (ID: 7) - View Profile | X | X | X | | | | | | | |
| Use Case (ID: 8) - View Game History | X | X | X | | | | | | | |
| Use Case (ID: 9) - Login | X | X | X | | | | | | | X |
| Use Case (ID: 10) - Create Game with AI | X | X | X | X | | X | | X | X | |
| | LoginRequestEvent | LoginSuccessEvent | RegisterFailedEvent | RegisterRequestEvent | RegisterSuccessEvent | UnregisterRequestEvent | MatchFinishEvent | MatchStartEvent | MatchUpdateEvent | PlayerMoveEvent |
| Use Case (ID: 1) - Register to System | | | X | X | X | | | | | |
| Use Case (ID: 2) - Create a New Game | | | | | | | | X | | |
| Use Case (ID: 3) - Run Game | | | | | | | X | X | X | X |
| Use Case (ID: 4) - Invite Another User | | | | | | | | X | | |
| Use Case (ID: 5) - Quit Game | | | | | | | X | | | |
| Use Case (ID: 6) - Unregister | | | | | | X | | | | |
| Use Case (ID: 7) - View Profile | | | | | | | X | | | |
| Use Case (ID: 8) - View Game History | | | | | | | X | | | |
| Use Case (ID: 9) - Login | X | X | | | | | | | | |
| Use Case (ID: 10) - Create Game with AI | | | | | | | | | | X |
| | PlayerMoveFailedEvent | PlayerMoveFailedReason | QuitMatchEvent | NoSuchUserEvent | RequestActiveInfoEvent | RequestProfileEvent | SendProfileEvent | | | |
| Use Case (ID: 1) - Register to System | | | | | | | | | | |
| Use Case (ID: 2) - Create a New Game | | | | X | | | | | | |
| Use Case (ID: 3) - Run Game | X | X | | | X | | | | | |
| Use Case (ID: 4) - Invite Another User | | | | X | | X | X | | | |
| Use Case (ID: 5) - Quit Game | | | X | | X | | | | | |
| Use Case (ID: 6) - Unregister | | | | | | | | | | |
| Use Case (ID: 7) - View Profile | | | | X | | X | X | | | |
| Use Case (ID: 8) - View Game History | | | | X | | X | X | | | |
| Use Case (ID: 9) - Login | | | | | | | | | | |
| Use Case (ID: 10) - Create Game with AI | X | X | X | | | X | X | | | |
| SERVER CLASSES | | | | | | | | | | |
| | AbstractServer | ConnectionToClient | Server | User | | | | | | |
| Use Case (ID: 1) - Register to System | X | X | X | X | | | | | | |
| Use Case (ID: 2) - Create a New Game | X | X | X | X | | | | | | |
| Use Case (ID: 3) - Run Game | X | X | X | X | | | | | | |
| Use Case (ID: 4) - Invite Another User | X | X | X | X | | | | | | |
| Use Case (ID: 5) - Quit Game | X | X | X | X | | | | | | |
| Use Case (ID: 6) - Unregister | X | X | X | X | | | | | | |
| Use Case (ID: 7) - View Profile | X | X | X | X | | | | | | |
| Use Case (ID: 8) - View Game History | X | X | X | X | | | | | | |

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|--|----------------|--------|----------------|---------------|---------------|--------------|------------------|--------------------|--|--|
| Use Case (ID: 9) - Login | X | X | X | X | | | | | | |
| Use Case (ID: 10) - Create Game with AI | X | X | X | X | | | | | | |
| CLIENT CLASSES | | | | | | | | | | |
| | AbstractClient | Client | InviteListener | LoginListener | MatchListener | MoveListener | RegisterListener | ServerUtilListener | | |
| Use Case (ID: 1) - Register to System | X | X | | | | | X | | | |
| Use Case (ID: 2) - Create a New Game | X | X | | | X | | | | | |
| Use Case (ID: 3) - Run Game | X | X | | | X | X | | | | |
| Use Case (ID: 4) - Invite Another User | X | X | X | | | | | X | | |
| Use Case (ID: 5) - Quit Game | X | X | | | X | | | | | |
| Use Case (ID: 6) - Unregister | X | X | | | | | | | | |
| Use Case (ID: 7) - View Profile | X | X | | | | | | X | | |
| Use Case (ID: 8) - View Game History | X | X | | | X | | | X | | |
| Use Case (ID: 9) - Login | X | X | | X | | | | | | |
| Use Case (ID: 10) - Create Game with AI | X | X | | | X | X | | X | | |
| | | | | | | | | | | |
| Updates 11/9/2017 | | | | | | | | | | |
| - Changed BoardGUI to GameTab | | | | | | | | | | |
| - Added FinishedMatch, Invitation, and Profile classes to satisfy use-cases. | | | | | | | | | | |
| - Added Xs where Use Cases 4,7, and 8 are satisfied with the new classes. | | | | | | | | | | |
| - Added ProfileController and RegisterController to Client abstraction list | | | | | | | | | | |
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| Updates 11/26/2017 | | | | | | | | | | |
| - Added all classes and use case satisfactions | | | | | | | | | | |
| - Reformated to avoid class grouping | | | | | | | | | | |