

# **Test Cases Document**

## **Checkers**

Adam Luong  
Benny Mai  
Dakota Wessel  
Jacky Zheng  
Tony Zhu

November 10, 2020  
Revision 2

TEST CATEGORY	TEST ID	TITLE	PRIORITY	DESCRIPTION	EXPECTED RESULT	ACTUAL RESULT	COMMENTS
Menu	T1	Creates a game room for the player.	1	When a player opens the game, they should be able to press the “Create” button on the menu screen to create a session along with an unique session id for players to start the game. Following it will lead the creator to the session screen.	The player that created the game will enter the board screen where both players can play. In the session, there will be a UI element displaying the session id for the game creator to share the id in order for the opponent to join.	This works as intended. Creating a game brings the first player to the game board screen.	Depending on your internet speed it may take a few seconds to lead the creator to the board screen else it would be instantaneous with a high-speed internet connection.
Menu	T2	Joins a game room for the player.	1	When the player enters the menu screen, they should be able to press the “Join” button on the menu screen, a popup box will prompt the user to enter a session id to join the room with the host. If it’s a successful id, it will either lead the player to the session screen.	The player that enters a valid session id will have their screen automatically updated to the board screen with the host. If session id is invalid, the screen will not be updated and another textbox will popup informing the user entered a valid session id.	The join button successfully brings the second player to the join menu screen. If the player correctly enters the code that the first player provides, the app will bring the player to the correct game session. There is no popup box, instead there is a simple input box.	Depending on your internet speed it may take a few seconds to join the board screen else it would be instantaneous with a high-speed internet connection.
Menu	T3	Provides instruction and rules to the user.	2	When the player enters the menu screen, they should be able to press the “Instructions” button on the menu screen, a popup box will appear with text that guides the user with steps on how to set up/join a game as well as the rules for checkers.	The player that presses the specific button in the menu screen will pop up an instruction textbox. The user will be able to close the textbox with the “x” button on the top right of it.	Pressing the instructions button will successfully bring the player to the instructions page and a back button will bring the player back to the main menu.	The user will be able to close the textbox with the “x” button on the top right of it.
Menu	T4	Menu no Internet Scenario will not allow the player to interact with the menu.	1	When the player tries to open the game without an internet connection, the user will be notified that they don’t have a valid connection and tells the user to refresh the application when they have a stable connection.	When a player with no internet connection opens the game, the screen will be updated to ask the user to refresh with a stable internet connection.	Since this is a browser application, if the user has no internet, the user will not be able to reach the website. The browser itself typically will let the user know that they have no internet connection.	The screen is on the menu screen, but it simply populates a big textbox with the text when there is no internet.
Menu	T5	Menu request to pause scenario will allow players to pause the game.	2	Assuming users are in the active game session, users can decide to pause the game, they should be able to press a “Request Pause” button on the menu screen. User 1 presses pause and user 2 responds to pause request popup box.	<ul style="list-style-type: none"><li>▶ When a user presses the button, a popup should appear with confirmation of request.</li><li>▶ Game time counter will be paused during the request.</li><li>▶ The second user should have a popup appear asking for pause confirmation after the first user presses “request pause”.</li><li>▶ After both users’ confirmation, the game should pause.</li><li>▶ If the user declines the pause request, the game resumes.</li><li>▶ No game interactions should be allowed after pause confirmation.</li></ul>	Function not implemented	n/a
Menu	T6	Menu request to resume scenario will allow players to resume the game.	2	Assuming both users are on the pause screen of a game session, users can decide to resume the game by pressing a “Request Resume” button on the menu screen. User 1 presses resume and user 2 responds to resume request popup box.	<ul style="list-style-type: none"><li>▶ When a user presses the button, a popup should appear with confirmation of request.</li><li>▶ The second user should have a popup appear asking for pause confirmation after the first user presses “request resume”.</li><li>▶ After both users’ confirmation, the game should resume.</li><li>▶ All normal game interactions should be allowed after resume confirmation.</li></ul>	Function not implemented	n/a
Gameplay Validation	T7	Making a move	1	The board will display moves the player can make, the player can then pick one move for their turn.	<ul style="list-style-type: none"><li>▶ The player can make exactly one move per turn</li><li>▶ The board is successfully updated to reflect the move the player made</li></ul>	Players are only able to make one move per turn. The board updates on both ends.	n/a
Gameplay Validation	T8	Player with the black pieces makes the first move	1	At the start of the game the player with the black pieces makes the first move.	<ul style="list-style-type: none"><li>▶ Only the player with the black pieces can make the first move.</li><li>▶ The player with red pieces can not make the first move.</li></ul>	Requirement changed, RED moves first. Black piece is not able to move first.	n/a
Gameplay Validation	T9	Displaying legal moves	1	When it is a player's turn the potential moves a player can make will be highlighted on the board.	The board only displays legal moves that the player can make.	The board only displays valid moves for the corresponding player. Red player's potential legal moves cannot be seen by Black.	n/a
Gameplay Validation	T10	Displaying illegal moves	1	When it is a player’s turn the board should display no moves that are illegal to make, preventing the player from making an illegal move.	The board displays no illegal moves to the player.	No illegal moves are shown.	n/a
Gameplay Validation	T11	Jumping Pieces	1	In the event that the player can jump over an opponent's piece the move will be displayed for the player and the player can then jump over and capture their opponent's piece(s).	<ul style="list-style-type: none"><li>▶ When a player jumps over the opponent’s piece(s) the player's piece moves to the correct location.</li><li>▶ The opponent’s piece(s) are captured and removed from the board.</li></ul>	Works as expected. Pieces are removed after being captured and pieces move to the correct location.	n/a
Gameplay Validation	T12	Request Draw	2	Users should be able to have the option within the UI that states they can request a draw. Both users should have this functionality displayed on both of their UI. This functionality is only available on the Game Screen	If a user clicks this option, it will send the other user this request. The other user may reject or accept this request. <ul style="list-style-type: none"><li>▶ Upon acceptance, the game will go to the draw screen.</li><li>▶ Upon rejection, the game is continued and nothing happens.</li></ul>	Function not implemented	n/a
Gameplay Validation	T13	Creating a King piece	1	When a Player’s piece moves to the reaches the first row of the other Player’s side of the board	The Player’s piece will change into a King piece (image will update) and both players will see this change	Upon reaching the other end, the piece does update and both players see this change.	n/a
UI Validation	T14	Timer Displays correctly	2	When a Player is on the Game Screen, a timer will display on the screen along with other game elements	Timer should start at 5:00 minutes and be located at the bottom right hand corner of the game screen	Timer works as expected. Counts down from 5 minutes.	n/a
UI Validation	T15	Timer Functionality	2	On the Game Screen the timer that is displayed will tick down	<ul style="list-style-type: none"><li>▶ Timer only ticks down when it is the player’s turn</li><li>▶ Timer should stop at 0:00 minutes</li><li>▶ When timer hits 0:00 minutes the current player will lose triggering Lose Screen</li><li>▶ When timer hits 0:00 minutes the other player will win triggering Win Screen</li></ul>	This works as intended. When it is Red's turn to move but they let the timer run out, the game ends and Black wins by default. Vice versa applies as well.	n/a
UI Validation	T16	Turn Display shows	2	When a Player is on the Game Screen, a message will display that states which players turn it is	Message initially displays as “It is Player 1’s Turn” on the top of the Game Screen above the board	Player turn indicator works as intended	n/a
UI Validation	T17	Turn Display functionality	2	The Player’s Turn Message updates based on which player’s turn it is	<ul style="list-style-type: none"><li>▶ When the Player 1 has made their move the message will update to “It is Player 2’s Turn” Until Game Ends</li><li>▶ When the Player 2 has made their move the message will update to “It is Player 1’s Turn” Until Game Ends</li></ul>	Turn display indicator works as intended	n/a
UI Validation	T18	Menu Screen Elements Display	2	The following elements in the Expected Results Section will display on the Menu Screen	<ul style="list-style-type: none"><li>▶ Title (If Implemented)</li><li>▶ Create Game Button</li><li>▶ Join Game Button</li><li>▶ Instructions Button (If Implemented)</li></ul>	Main menu has all of these elements and buttons work as intended	n/a
UI Validation	T19	Game Screen Elements Display	2	The following elements in the Expected Results Section will display on the Game Screen	<ul style="list-style-type: none"><li>▶ Turn Display (See Test ID: T16)</li><li>▶ Timer (If Implemented) (See Test ID: T14)</li><li>▶ Submit Move Button (If Implemented)</li><li>▶ Pause Button (If Implemented)</li><li>▶ Request Draw Button (If Implemented)</li><li>▶ Game Board</li><li>▶ Black Checker Pieces</li><li>▶ Red Checker Pieces</li></ul>	Turn display works as intended. Timer works as intended. N/A N/A N/A Game board works as intended Black checker pieces works as intended Red Checker Pieces work as intended	n/a
Ending Game	T20	Game Win/Lose/Draw Screen	1	Upon completion of the game, they should be notified of whether they are the winner of the game, loser of the game or if it is entirely a draw. This notification will be displayed on the UI.	The user who wins the game should have a UI displaying that they are the winner. The user who loses the game should have a UI displaying that they are the loser. For draws, both users will be displayed of a draw.	Win/Lose screen is implemented. Draw screen is not. The game will, however, indicate to both players who has won the game following a timeout. The game will also indicate the winner to the player who made the winning move, but not to the player who had lost.	n/a
Ending Game	T21	Request Rematch	2	Users should be able to have the option within the UI that states they can request a rematch. Both users should have this functionality displayed on both of their UI. This functionality should be after the game is over.	If a user clicks this option, it will send the other user this request. The other user may reject or accept this request. Upon acceptance, the game state will be reinitialized to the very start and the game is played once again. Upon rejection, nothing will happen.	The request functionality does not work. Rematches are only possible with timeout win conditions. Players who win the game in any other way than timeouts do not reach the win condition so they can never rematch.	n/a
Ending Game	T22	Leave Game	2	Users can leave, or exit/force quit, the entire game whenever requested. Whether it is in the beginning, middle of end of the game. It will be displayed in the UI.	Users who click on this functionality should be able to have an alert to confirm their request to leave the game. If user accepts this request, the user will leave the game and the other user will win automatically.	Users can leave game by closing browser or clicking the back button	n/a