

2a. Revised Versions of the previously submitted two Full Use Case Descriptions

Use Case Description - I : Initiate a Game

Use Case	Initiate a Game
Primary Actor	Human Players, Computer Players
Stakeholders and Interests	Human Players, Computer Players, Developers, Testers
Preconditions	<p>Minimum system requirements to initiate a game: To run the game Java Runtime Environment(JRE) is a system requirement and needs to be installed. The Java Development Kit is also requirement to compile the code and use functions like javac which will be needed to initiate the game.</p> <ol style="list-style-type: none"> 1. All the system requirements are installed and the game is able to start as intended. 2. The menu and the general user interface is shown to the players. 3. The player(s) are present and ready to play. 4. Player(s) is able to interact with the functions of the menu and select settings to apply to the game. 5. Human player can choosing difficulty, amount of human players, the amount of computer players.
Postconditions	<ol style="list-style-type: none"> 1. Players have initiated the game with all users settings applied. 2. Correct difficulty, and number of players is shown, accounted for and is appropriate to the precondition. 3. The board, initial scores, whose turn it is and the pieces are all shown to the players and the game has been initiated and is ready to play.
Main Success Scenario	<ol style="list-style-type: none"> 1. The human player opens the game. 2. The human player clicks New Game. 3. The human player chooses total number of human players. 4. The human player chooses number of computer players and difficulty (if not playing with 4 human players). 5. The game begins.
Alternative Flows	-----
Exceptions	<ol style="list-style-type: none"> 1. If hard difficulty level is chosen, game will provide fewer hints. 2. If easy difficulty level is chosen, game will provide more hints.

Special Requirements	<ol style="list-style-type: none"> 1. At least one player is human. 2. Human player must choose the color theme before the game has started if they want to change the colors.
Open Issues	<ol style="list-style-type: none"> 1. The initial game color may be a disadvantage to people with color vision deficiency. 2. The Human player may not be able to log in game due to technical reasons.

Use Case Description - II : Take a Turn

Use Case	Take a Turn
Primary Actors	Human Players, Computer Players
Stakeholders and Interests	Human Players, Computer Players
Preconditions	<p>Game has been set up and is ready to proceed based on the procedure in "Initiate a game" use case.</p> <ol style="list-style-type: none"> 1. Game has started with chosen difficulty level. 2. Player with color vision deficiency can easily differentiate between different pieces. 3. Human player may see hints on where to put pieces. 4. The game notifies which human player will take their turn next. 5. The game board is properly displayed with all the pieces and other game elements. 6. The player is also able to interact with the pieces and rotate them. 7. The players can see pool of pieces to choose from and interact with it.
Postconditions	<ol style="list-style-type: none"> 1. The game board updates to show piece placed during players turn. 2. The score updates to show current score. 3. The game moves to the next turn and notifies the players who is up next.
Main Success Scenario	<ol style="list-style-type: none"> 1. The player receives notification that it is their turn. 2. The player picks the piece they might want to use and the game shows hints for where it can go(if applicable) 3. The player decides on which piece to use and places it in an available spot.

Alternative Flows	2.a. If hints are turned off then the player will not be shown hints before placing their piece.
Exceptions	<ol style="list-style-type: none">1. Game crashes during piece placing.2. The player tries an Invalid move. There could be a scenario where the player tries to place a piece in an invalid spot maybe somewhere it doesn't fit or it is not touching a players own piece. This should give an error and tell the player to repeat the turn.
Special Requirements	<ol style="list-style-type: none">1. Wait until the current player has finished their turn before starting the next turn.2. The board displays the current state of the game; active player, score, etc.
Open Issues	<ol style="list-style-type: none">1. Player can not place more than one piece at a time.2. Player is not allowed to put any pieces laying side by side.3. Player can not undo or change the position of any pieces after completing a turn.