

# Software Engineering Group Project - Test Specification

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# 1. INTRODUCTION

## 1.1 Purpose of this document

This document describes all aspects of testing to be performed on the Chess Tutor project and ensures that functional requirements perform as expected.

## 1.2 Scope

This document is relevant to all team members that are involved in the development of the software ("the code"). This document helps to describe and outline the required modules that must be tested to ensure completion of the project.

It is assumed that the reader is already aware of the details laid out in the following documentation:

- SE.QA.RS-CS22120 - Chess Tutor Requirements Specification [1]
- SE.QA.06 - Test Procedure Standards [2]
- UI-Spec-Docu-GP9 - User Interface Specification [3]
- UI-Spec-Pres-GP9 - User Interface Presentation [4]

## 1.3 Objectives

The objective of the document is to:

1. Provide a detailed description of how testing will function throughout the project to ensure that all requirements are met, and function as expected.
2. Serve as a guide to assist development of the final solution, and provide criteria against which to test said solution.
3. Describe the purposes of various tests while identifying the required inputs and expected outputs, procedures for executing tests, and configuration of fail or pass criteria in order to determine acceptance of the project.

## 2. TEST SPECIFICATION

| Test Ref | Requirement Being tested | Test Content   | Input                                       | Output                                    | Pass Criteria   |
|----------|--------------------------|--|---|---|---|
| SE-F-001 | FR1                      | Test whether the starting screen appears/functions correctly                         | Launch application                          | Starting screen is displayed              | An appropriate screen is displayed                          |
| SE-F-002 | FR1                      | Check whether start new game works properly  | Click 'Start New Game'                      | Player name screen appears                | Player name screen appears                                  |
| SE-F-003 | FR1                      | Check whether 'Load Unfinished Game' works correctly by using previously saved games | Click 'Load Unfinished Game'                | Previous game is loaded                   | Previous saved game in the log files is loaded successfully |
| SE-F-004 | FR1                      | Check whether 'View Game Finished' works properly                                    | Click 'View Finished Game'                  | Allows player to view their previous game | Previous game is enabled to view                            |
| SE-F-005 | FR1                      | Check whether the players entered their names after being prompted                   | Insert players' names into the provided tab | Player's names are displayed              | Players names are confirmed                                 |
| SE-F-006 | FR1                      | Check whether name counts exceed 32 characters                                       | When players entered their names            | Doesn't allow more than 32 characters     | Players names are allowed                                   |
| SE-F-007 | FR1                      | Check whether name characters contain special characters                             | Player enters name                          | Doesn't special characters                | Doesn't allow special characters                            |
| SE-F-008 | FR1                      | Check whether blank names which where no characters are entered                      | When players entered nothing                | Doesn't allow                             | Doesn't allow empty name                                    |

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| <b>SE-F-009</b> | FR2       | Check whether White side player's name(Tony) is at the bottom, whilst Black side player's name(Sam) is at the top  | Entering names for black and white sides  | Board display as Tony's name as bottom whilst Sam's name at the top | Players' names will be shown as white side(Tony) is at the bottom whilst black side(Sam) is at the top                          |
| <b>SE-F-010</b> | FR2       | Both players names, pieces and colour is tracked correctly   | Makes a legal move  | Updated board   | The players name should match the pieces and colour   |
| <b>SE-F-011</b> | FR2 & FR3 | Detects any Pawn Pieces where they have reached the farthest rank from its original position and their promotion is mandatory while having the ability to promote to a Queen, Knight, Bishop or Rook Piece | Each of the Pawn Pieces that reached the farthest rank from its original position | indicates the player that a Pawn Piece is ready for promotion       | Players must choose between the pieces to promote from a pawn   |
| <b>SE-F-012</b> | FR3       | Tutor keeps track of starting player as in white side  | Starting the game   | White side pieces ready to be moved                                 | Starting player and pieces must be from white side  |
| <b>SE-F-013</b> | FR3       | Tutor keeps track of current player and shows visually whos turn it is   | New turn  | Changed turn  | Changes turn and has a visual to show whos turn it is   |
| <b>SE-F-014</b> | FR3       | Unambiguous board representation   | New game and move a piece   | Board clearly displayed   | Unambiguous board and pieces represented are clearly able to tell the pieces apart, which accurately represents the board state |

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| <b>SE-F-015</b> | FR4 | Can only make one move per turn                                      | Make a move   | Turn switches to opposite players turn                             | Turn switches to opposite players turn   |
| <b>SE-F-016</b> | FR4 | Only current player can move their own pieces                        | Player move their own pieces  | Players moving pieces  | Only current player can move there coloured pieces   |
| <b>SE-F-017</b> | FR4 | Current player cannot move opponent's pieces                         | Player move the pieces of opponent  | Opponent's pieces do not move                                      | Player is not allowed to move opponent's pieces  |
| <b>SE-F-018</b> | FR4 | Check if piece reselection works                                     | Select a piece and then reselect another piece and repeat with all piece types. | The new piece should be selected and the old piece should deselect | The new piece's moves and the old piece should not have its moves shown.                     |
| <b>SE-F-019</b> | FR5 | Check if piece selection works when the piece is pinned              | Check piece that cannot move as it is pinned                                    | Available piece moves are shown                                    | No available moves are shown that would move piece so it's no longer blocking check          |
| <b>SE-F-020</b> | FR5 | Check if piece selection works when the piece is in check            | Check piece that cannot move as it is check                                     | Available piece moves are shown                                    | No available moves are shown that aren't preventing check (ie: capturing the checking piece) |
| <b>SE-F-021</b> | FR5 | Check if piece reselection works when the piece is available to move | Click piece that is available to move   | Available piece moves are shown                                    | All available positions should be shown to move to   |

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| <b>SE-F-022</b> | FR5 | Check whether Pawn Pieces are moving legally in one step  | Clicking on Pawn Pieces<br>To only move vertically one step as any legal moving space is highlighted  | Pawn Pieces should only move one step  | Pawn Pieces moved correctly to only move vertically (one step)  |
| <b>SE-F-023</b> | FR5 | Check whether Pawn Pieces are moving legally in two steps   | Clicking on Pawn Pieces<br>To only move vertically two steps as any legal moving space is highlighted   | Pawn Pieces should only move two steps   | Pawn Pieces moved correctly to only move vertically (two steps)   |
| <b>SE-F-024</b> | FR5 | Test functionality of Pawn Pieces for capturing pieces  | Pawn Pieces could only move towards enemy pieces as in diagonally to the left or right  | Pawn Pieces could only capture enemy pieces diagonally and then landing on its designated location | Pawn Pieces attacked correctly to only capture enemy pieces as in diagonally to the left or right then landing on its designated location |
| <b>SE-F-025</b> | FR5 | Test Pawn Pieces applying En Passant rule which only occurs when a pawn captures a horizontally adjacent enemy pawn piece that made an initial two square advance | Pawn Pieces could only capture enemy pawn pieces if it advances two square which its position is adjacent to the player's pawn piece and the space is highlighted | Pawn Pieces could only capture enemy pawn pieces if it met the requirements of En Passant          | Pawn Pieces applying the En Passant rule to capture enemy pawn pieces whenever its position is adjacent to the player's pawn piece        |

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| <b>SE-F-026</b> | FR5 | Check if players intend to move Pawn Pieces into restricted spaces | Players attempting to move Pawn Pieces into illegal spaces   | Pawn Pieces return back to its initial moving space and flashes red   | Pawn Pieces flashes red and is not moved   |
| <b>SE-F-027</b> | FR5 | Check whether Bishop Pieces are moving legally                     | Clicking on Bishop Pieces to only move diagonally as many steps as desired as any legal moving spaces are highlighted  | Bishop Pieces should only move diagonally   | Bishop Pieces moved correctly to only move diagonally as many steps as desired   |
| <b>SE-F-028</b> | FR5 | Test functionality of Bishop Pieces for capturing enemy pieces     | Bishop Pieces could only move diagonally in any steps while any enemy pieces that are allowed to be captured are highlighted                                     | Bishop Pieces could only capture enemy pieces diagonally and then landing on its designated location              | Bishop Pieces attacked correctly to only capture diagonally in any steps then landing on its designated location                     |
| <b>SE-F-029</b> | FR5 | Test functionality of Bishop making illegal move                   | Move bishop piece horizontally to a free square  | Bishop piece flashes red  | Bishop piece flashes red and is not moved  |
| <b>SE-F-030</b> | FR5 | Check whether Knight Pieces are moving legally horizontally        | Clicking on Knight Pieces to only move one space left or right horizontally and then two spaces up or down vertically as any legal moving spaces are highlighted | Knight Pieces should only move up or down one space vertically and over two spaces horizontally as in a 'L' shape | Knight Pieces moved correctly to only move one space left or right horizontally and then two spaces up or down vertically (top side) |



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| <b>SE-F-031</b> | FR5 | Check whether Knight Pieces are moving legally on vertically                       | Clicking on Knight Pieces to only move two spaces left or right horizontally and then one space up or down vertically as any legal moving spaces are highlighted                    | Knight Pieces should only move up or down two spaces vertically and over one space horizontally as in a '↖' shape | Knight Pieces moved correctly to only move two spaces left or right horizontally and then one space up or down vertically (bottom side)   |
| <b>SE-F-032</b> | FR5 | Test functionality of Knight Pieces for capturing enemy pieces vertically          | Knight Pieces could only move one space left or right horizontally and then two spaces up or down vertically while the enemy pieces that are allowed to be captured are highlighted | Knight Pieces could only capture enemy pieces after attacking and then landing on its designated location         | Knight Pieces attacked correctly to only capture one space left or right horizontally and then two spaces up or down vertically then landing on its designated location (top side)    |
| <b>SE-F-033</b> | FR5 | Test functionality of Knight Pieces for capturing enemy pieces on the horizontally | Knight Pieces could only move two spaces left or right horizontally and then one space up or down vertically while the enemy pieces that are allowed to be captured are highlighted | Knight Pieces could only capture enemy pieces after attacking and then landing on its designated location         | Knight Pieces attacked correctly to only capture two spaces left or right horizontally and then one space up or down vertically then landing on its designated location (bottom side) |
| <b>SE-F-034</b> | FR5 | Test functionality of knight piece making illegal move                             | From starting position Move knight to across the board to a square it shouldn't be able to go   | Knight piece should not be moved  | Knight piece should flash red and not move  |

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| <b>SE-F-035</b> | FR5 | Check whether Rook Pieces are moving legally as in vertically             | Clicking on Rook Pieces to only move vertically for as far as desired as any legal moving spaces are highlighted                              | Rook Pieces should only move vertically as in a straight line   | Rook Pieces moved correctly to only move vertically for as far as desired (vertically)   |
| <b>SE-F-036</b> | FR5 | Check whether Rook Pieces are moving legally as in horizontally           | Clicking on Rook Pieces to only move horizontally for as far as desired as any legal moving spaces are highlighted                            | Rook Pieces should only move horizontally as in a straight line   | Rook Pieces moved correctly to only move horizontally for as far as desired (horizontally)   |
| <b>SE-F-037</b> | FR5 | Test functionality of Rook Pieces for capturing enemy pieces vertically   | Rook Pieces could only move vertically for as many spaces as desired while the enemy pieces that are allowed to be captured are highlighted   | Rook Pieces could only capture enemy pieces in a vertical direction and then landing on its designated location   | Rook Pieces attacked correctly to only capture vertically for as many spaces as desired then landing on its designated location (vertically)     |
| <b>SE-F-038</b> | FR5 | Test functionality of Rook Pieces for capturing enemy pieces horizontally | Rook Pieces could only move horizontally for as many spaces as desired while the enemy pieces that are allowed to be captured are highlighted | Rook Pieces could only capture enemy pieces in a horizontal direction and then landing on its designated location | Rook Pieces attacked correctly to only capture horizontally for as many spaces as desired then landing on its designated location (horizontally) |

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| <b>SE-F-039</b> | FR5 | Test functionality of rook moving illegally                  | Attempt to move rook piece diagonally  | Rook piece flashes red and isn't moved  | Rook piece flashes red and isn't moved   |
| <b>SE-F-040</b> | FR5 | Check whether Queen Piece is moving legally                  | Clicking on Queen Piece to move in any directions and any distance as in vertically, horizontally and diagonally as any legal moving spaces are highlighted                    | Queen Pieces could move into any highlighted space desired  | Queen Piece moved correctly to only move in any directions and any distance as in vertically, horizontally and diagonally  |
| <b>SE-F-041</b> | FR5 | Test functionality of Queen Piece for capturing enemy pieces | Queen Piece could move in any direction and any distance regardless of vertical, horizontal or diagonal while any enemy pieces that are allowed to be captured are highlighted | Queen Piece could move in any direction and any distance regardless of vertical, horizontal or diagonal to capture any enemy pieces and then landing on the designated location | Queen Piece attacked correctly to only capture in any direction and any distance regardless of vertical, horizontal or diagonal landing on its designated location |
| <b>SE-F-042</b> | FR5 | Test functionality of queen piece making illegal move        | Move queen piece to a position shouldn't be able to move   | Queen piece should flash red and not move   | Queen piece should flash red and not move  |
| <b>SE-F-043</b> | FR5 | Check whether King Piece is moving legally                   | Clicking on King Piece to only move one space in any direction as any legal moving spaces are highlighted  | King Piece should only move one space in any direction  | King Piece moved correctly to only move one space in any direction   |

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| <b>SE-F-044</b> | FR5 | Test functionality of King Piece for capturing enemy pieces | King Piece only moves one space in any direction as vertical, horizontal or diagonal to capture enemy pieces while any enemy pieces that are allowed to be captured are highlighted | King Piece could only move in one space in any direction as vertical, horizontal or diagonal to capture enemy pieces and then landing on the designated location | King Piece attacked correctly to only capture one space in any direction as vertical, horizontal or diagonal then landing on its designated location                          |
| <b>SE-F-045</b> | FR5 | Test functionality of king piece moving illegally           | Move king piece across the board to a square it shouldn't be able to move   | Move is not available so king cannot move  | Move is not available as it is illegal  |
| <b>SE-F-046</b> | FR5 | Test functionality of king piece moving itself into check   | Attempt to move king piece to a square that is attacked by opponents piece  | Move is not available so king cannot move  | King cannot move into illegal position  |
| <b>SE-F-047</b> | FR5 | Test functionality of kingside castling when allowed        | Castling when neither the king or rook has moved yet and there is space between on the kings side.<br>FEN-rnbqkbnr/pp2pppp/8/2pp4/4P3/5N2/PPP/PBPPP/RNBQK2R w KQkq - 0 4            | The king should move 2 spaces right from players perspective and the rook should be one square to the left of king   | Should be king and rook next to each other king on the left side of rook from the player's perspective.<br>FEN-rnbqkbnr/pp2pppp/8/2pp4/4P3/5N2/PPP/PBPPP/RNBQ1R K1 b kq - 1 4 |

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| <b>SE-F-048</b> | FR5 | Test functionality of queenside castle when allowed  | Castling when neither the king or rook has moved yet and there is space between on the queens side.<br>r1bqkb1r/pp1p1p1p/2n2np1/2p1p3/4P3/1PN5/PBPPQPPP/R3KBNR w KQkq - 0 6 | The king should move 2 squares to the left from players perspective and the rook should be one square to the right of king | Should be king and rook next to each other with the rook on the right side of the king.<br>FEN-r1bqkb1r/pp1p1p1p/2n2np1/2p1p3/4P3/1PN5/PBPPQPPP/2KR1BNR b kq - 1 6 |
| <b>SE-F-049</b> | FR5 | Test functionality of kingside castle when not allowed because king or rook previously moved   | Attempt castling when there is space to castle but the king or rook have already moved.<br>FEN-rnbqkb1r/pp2pppp/3p1n2/2p5/2B5/5N2/PPPP1PPP/RNBQK2R w Qkq - 2 6              | Castling move is not available   | Cannot castle  |
| <b>SE-F-050</b> | FR5 | Test functionality of queenside castle when not allowed because king or rook previously moved. | Attempt castling when there is space to castle but the king or rook have already moved.<br>FEN-r1bqkb1r/pp1p1p1p/2n2np1/2p1p3/4P3/1PN5/PBPPQPPP/R3KBNR w Kkq - 4 8          | Castling move is not available   | Cannot castle  |

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| <b>SE-F-051</b> | FR5 | Test functionality of kingside castle when not allowed because there are pieces in the way  | Attempt castling when there is no space to castle however the king and rook haven't moved.<br>FEN-rnbqkbnr/pp2pppp/3p4/2p5/4P3/5N2/PPPP1PPP/RNBQKB1R w KQkq - 0 3     | Castling move is not available | Cannot castle |
| <b>SE-F-052</b> | FR5 | Test functionality of queenside castle when not allowed because there are pieces in the way | Attempt castling when there is no space to castle however the king and rook haven't moved.<br>FEN-rnbqkb1r/pp2p1pp/2p2p1n/3p4/4P3/3PBQ2/PPP2PPP/RN2KB1R w KQkq d6 0 5 | Castling move is not available | Cannot castle |
| <b>SE-F-053</b> | FR5 | Test functionality of attempting to castle when in check                                    | Click king and then attempt either king or queenside castle.<br>FEN-r1bqk1nr/pppp2pp/2n2p2/4p3/1bB1P3/3P1N2/PPP2PPP/RNBQK2R w KQkq - 0 1                              | Castling move is not available | Cannot castle |

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| <b>SE-F-054</b> | FR5 | Test functionality of attempting to castle through check                | Click the king and then attempt either a king or queenside castle when the path between is covered by another piece.<br>FEN-r1bqk2r/pppp1pp/2n2n2/2b1p3/2B1P3/5P2/PPPPN1PP/RNBQK2R w KQkq - 0 1 | Castling move is not available   | Cannot castle   |
| <b>SE-F-055</b> | FR5 | Test functionality of Pawn Pieces which are eligible for promotion      | Clicking on Pawn Pieces which have advanced until the starting point of the enemy.  | display a window for players to allow them choose which piece to promote to from a Pawn Piece into a Queen, Knight, Bishop or Rook Piece | Pawn Pieces are valid to undergo the promotion process                          |
| <b>SE-F-056</b> | FR5 | Test error condition if piece is moved off the board                    | Check pieces can only stay on the allocated board by clicking on a piece and then off the board   | Nothing happens and no move is made.   | Nothing happens and no move is made as the move is invalid.                     |
| <b>SE-F-057</b> | FR6 | Tutor detects whether a player's king is currently in the checked state | Only appears when the player's King Piece is being attacked<br>FEN-rnb1kbnr/pp1pppp/2p5/q7/3P4/4P3/PP2PPP/RNBQKBNR w KQkq - 0 1   | Display the player's king and the attacking piece with a different colour to indicate it as in a checked state                           | The player is indicated that the player's king is in check as the tile goes red |

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| <b>SE-F-058</b> | FR6       | Promoted pieces function correctly when putting opposing king in check                  | Move a pawn to the end and promote to a piece that puts opponent in check  | Opposing king should be in check successfully  | New piece functions correctly and puts opponent in check  |
| <b>SE-F-059</b> | FR7       | Tutor detects whether a players king is in the state of checkmate                       | Only appears when the a players King Piece is in checked state and do not have any legal moves left.<br>FEN-r1bqkbnr/pppp1Qp1/2n4p/4p3/2B1P3/8/PPPP1PPP/RNB1K1N R b KQkq - 0 1 | Display players king with a colour which indicates that it is in checkmate and the player has won the game | The player indicates that the opponent's king is in checkmate. Game ends and a window pop up to show this |
| <b>SE-F-060</b> | FR7 & FR8 | Tutor detects whether checkmate is avoidable by moving piece to block check             | Put a player in check and then have the only option to block the checkmate<br>FEN-k5R1/7R/8/8/2r5/8/8/4K3 b - - 1 1  | Piece is moved and checkmate blocked   | Checkmate is blocked and game continues   |
| <b>SE-F-061</b> | FR7 & FR8 | Tutor detects whether checkmate is avoidable by moving piece to capture attacking piece | Put a player in check and have the only option to capture the attacking piece to avoid checkmate.<br>FEN-k5R1/7R/8/8/2b5/8/8/4K3 b - - 1 1                                     | Piece is moved and opponents piece is captured, checkmate avoided  | Checkmate is blocked and game continues   |



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| <b>SE-F-062</b> | FR7 & FR8 | Tutor detects whether checkmate is avoidable by moving king out of checkmate | Put a player in check and have the only option to move the king to avoid checkmate<br>k7/7R/8/8/R7/8/8/4K3<br>b - - 1 1                  | King is moved and checkmate is avoided  | Checkmate is blocked and game continues                                       |
| <b>SE-F-063</b> | FR7 & FR8 | Tutor detects whether the player's king is in the state of checkmate         | Only appears when the player's King Piece is in checked state and do not have any legal moves left.<br>FEN-8/8/8/8/4k3/4q3/4K3 w - - 1 1 | Display player's king with a colour which indicates that it is in checkmate and the opponent has won the game | The player is indicated that the player's king is in checkmate                |
| <b>SE-F-064</b> | FR8       | Checkmate  | One player is checkmated   | Game finishes   | Game ends and players asked if they want to save the game                     |
| <b>SE-F-065</b> | FR8       | Resign   | Click 'Resign' and player is notified that the game will be saved for replay at a future point   | Game finishes as one player has resigned  | Game ends and players are notified that the game is saved for future purposes |
| <b>SE-F-066</b> | FR8       | Agree to finish (Offer Draw)   | Click 'Offer Draw' and prompt to the opponent for agreement  | Game finished and ends in a draw  | Game ends in a draw as both players agree to a draw                           |

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| <b>SE-F-067</b> | FR8      | Disagree to finish (Offer Draw)               | Click 'Offer Draw' and prompted to the opponent for disagreement      | Game continues as the player takes the turn while the 'Offer Draw' button disappeared | Game continues as one of the players disagree to a draw   |
| <b>SE-F-068</b> | FR8      | Resign the game after game is won (checkmate) | Resign the game after you have already won                            | Nothing as game is not running  | Game does not allow you to resign as you have already won the game  |
| <b>SE-F-069</b> | FR9      | Game quit                                     | Click ' Save and Quit'  | Game finishes with save prompt  | Game closes and player asked if they want to save the game then returned to main menu. Game is saved for later. |
| <b>SE-F-070</b> | FR9      | Exit game without saving                      | Click 'Exit game without saving'                                      | Game finishes and isn't saved. Returned to main menu                                  | Game finishes, not saved and returned to main menu  |
| <b>SE-F-071</b> | FR9/FR11 | Exit game without quitting                    | One player force closes the game                                      | Game is saved for later   | Game is saved although it was force closed  |
| <b>SE-F-072</b> | FR10     | Game replay                                   | Player clicks 'Load Unfinished Game' and selects a game from the list | Run an existing unfinished game   | Allow players to play the unfinished game   |

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| <b>SE-F-073</b> | FR10 | Replay step forward                                    | Click 'Step Forward'                           | Replay goes forward   | Replay rolls forward  |
| <b>SE-F-074</b> | FR10 | Replay step backwards                                  | Click 'Step Backwards'                         | Replay goes backwards   | Replay rolls backwards  |
| <b>SE-F-075</b> | FR10 | Replaying invalid step forward                         | Player reached the end as the most recent move | 'Step Forward' button does not appear                           | Unable to replay steps forward  |
| <b>SE-F-076</b> | FR10 | Replaying invalid step backwards                       | Player reached the beginning as the first move | 'Step Backwards' button does not appear                         | Unable to replay steps backwards  |
| <b>SE-F-077</b> | FR10 | Attempt to replay game when there is nothing to replay | Click replay game                              | Program will popup and say there are no games to replay         | Program will popup and say there are no games to replay   |
| <b>SE-F-078</b> | FR11 | Game saved while playing                               | Move made                                      | Game is saved to a file to later be either restored or replayed | If the program crashes the game can be restored. If game is saved it can be replayed            |
| <b>SE-F-079</b> | FR11 | Game reloaded  | Previous unfinished game selected and reloaded | Game is loaded from a file and is restored                      | Game is restored as it was when previously exited with the same players turn and board position |

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| <b>SE-F-080</b> | FR11 | Save name cannot exceed 32 characters                   | Input a name longer than 32 characters   | Won't allow game to be named longer than 32 characters | Game will output that the name cannot exceed 32 characters and doesn't allow the game to be saved. |
| <b>SE-F-081</b> | FR11 | Save name cannot have special characters                | Input a name with special characters   | Outputs "Name cannot contain special characters"       | Doesn't allow game to contain special characters with output error                                 |
| <b>SE-F-082</b> | N/A  | Test whether back button works in main menu and in game | Press back button on the main menu screen after clicking view game options and in game after clicking quit | Changes back to previous screen                        | Changes back to previous screen  |

### 3. REFERENCES

- [1] QA Document SE.QA.RS-CS22120 - Chess Tutor Requirements Specification
- [2] QA Document SE.QA.06 - Test Procedure Standards
- [3] UI-Spec-Docu-GP9 - User Interface Specification
- [4] UI-Spec-Pres-GP9 - User Interface Presentation

## 4. DOCUMENT HISTORY

| Version | Issue No. | Date     | Changes made to document                            | Changed by     |
|---------|-----------|----------|---|----------------|
| 0.1     | N/A       | 10/02/23 | Added tests for each FR.                            | JIB16          |
| 0.2     | N/A       | 15/02/23 | Added/modified additional tests.                    | CKC2           |
| 0.3     | N/A       | 20/02/23 | Reformatted document structure.                     | CKC2           |
| 0.4     | N/A       | 02/03/23 | Added error conditions.                             | JIB16          |
| 0.5     | N/A       | 07/03/23 | Reformatted document. Prep for review.              | TYW1           |
| 0.6     | N/A       | 10/03/23 | Made changes from review.                           | CKC2           |
| 0.7     | N/A       | 10/03/23 | Made changes from review.                           | JIB16          |
| 1.0     | N/A       | 11/03/23 | Document released.                                  | TYW1           |
| 1.1     | N/A       | 22/03/23 | Adjusted content from feedback.                     | CKC2,<br>JIB16 |
| 1.2     | N/A       | 02/05/23 | Added FEN strings for tests for more replicability. | JIB16          |