Software Engineering Group Project

Test Report

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| Author: | Dustin Baker [dub4] |
| Config Ref: | SE\_GP17\_TestReport |
| Date: | 28th April 2023 |
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# Test Report

The following Test Reports outline the results of regression tests on the “Chess Tutor Application”.

Each test is referenced via a “Test Ref” which relates to that seen in the “Test Specification” [1].

## Regression Iteration x

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Ref** | **Test Content** | **Result** | **Explanation** |
| **SE-F-001** | Check that the menu prompts are displayed upon starting the application |  |  |
| **SE-F-002** | Check that the "New Game" prompt can be selected |  |  |
| **SE-F-003** | Check that the escape key returns the user to the previous screen |  |  |
| **SE-F-004** | Check the new game setup allows Username entries |  |  |
| **SE-F-005** | Check the new game setup does not allow an empty name entry |  |  |
| **SE-F-006** | Check that the “New Game” setup does not allow username with invalid characters (new lines characters, special characters) |  |  |
| **SE-F-007** | Check that the program responds correctly to a name which exceeds the character limit of 20 |  |  |
| **SE-F-008** | Check that the "Play/Confirm" prompt can be selected |  |  |
| **SE-F-009** | Check that the "Load Game" prompt can be selected if a save file is available |  |  |
| **SE-F-010** | Check that the "Load Game" prompt cannot be selected if no save files are available |  |  |
| **SE-F-011** | Check that the "Quit" prompt can be selected without issue |  |  |
| **SE-F-012** | Check that the username entries are saved to the file |  |  |
| **SE-F-013** | Check that the User colour is kept track of in save file |  |  |
| **SE-F-014** | Check that the Users pieces are kept track of (initial state) |  |  |
| **SE-F-015** | Check the Users pieces are kept track of after a piece is taken |  |  |
| **SE-F-016** | Check the initial position of the pieces is correct |  |  |
| **SE-F-017** | Check that White moves first |  |  |
| **SE-F-018** | Check that the program indicates whose turn it is |  |  |
| **SE-F-019** | Check that the pieces are presented in an unambiguous way |  |  |
| **SE-F-020** | Check that only the current User's pieces can be selected |  |  |
| **SE-F-021** | Check that the User can select different pieces during their turn |  |  |
| **SE-F-022** | Check that the pieces change appearance when selected |  |  |
| **SE-F-023** | Check the program responds correctly when the user during piece selection clicks outside the board. |  |  |
| **SE-F-024** | Check the User can’t select a piece after they’ve moved another piece that turn. |  |  |
| **SE-F-025** | Check to see if the program responds when the user tries to move their own piece onto a friendly piece |  |  |
| **SE-F-026** | Check that all the legal moves are displayed when a Pawn is selected |  |  |
| **SE-F-027** | Check the Pawn can only move 1 or 2 spaces for its first move |  |  |
| **SE-F-028** | Check the Pawn can only move 1 space for every move that is not its first |  |  |
| **SE-F-029** | Check that a Pawn can take a piece diagonally forward |  |  |
| **SE-F-030** | Check that a Pawn can perform en passant to take a piece |  |  |
| **SE-F-031** | Check that all legal moves are displayed when a Rook is selected |  |  |
| **SE-F-032** | Check that a Rook can move Orthogonally |  |  |
| **SE-F-033** | Check that a Rook can move Orthogonally to take pieces |  |  |
| **SE-F-034** | Check that all legal moves are displayed when a Knight is selected |  |  |
| **SE-F-035** | Check a Knight can move in L-shape |  |  |
| **SE-F-036** | Check a Knight can take a piece with L-shape movement |  |  |
| **SE-F-037** | Check that all legal moves are displayed when a Bishop is selected |  |  |
| **SE-F-038** | Check a Bishop can move diagonally |  |  |
| **SE-F-039** | Check a Bishop can take a piece diagonally |  |  |
| **SE-F-040** | Check that all legal moves are displayed when a Queen is selected |  |  |
| **SE-F-041** | Check a Queen can move diagonally and orthogonally |  |  |
| **SE-F-042** | Check a Queen can take a piece diagonally and orthogonally |  |  |
| **SE-F-043** | Check that all legal moves are displayed when a King is selected |  |  |
| **SE-F-044** | Check a King can move 1 square diagonally or orthogonally |  |  |
| **SE-F-045** | Check a King can take a piece by moving 1 square diagonally |  |  |
| **SE-F-046** | Check left side castling rule is implemented correctly |  |  |
| **SE-F-047** | Check right side castling rule is implemented correctly |  |  |
| **SE-F-048** | Check en passant rule is implemented correctly |  |  |
| **SE-F-049** | Check pieces can’t move off the board |  |  |
| **SE-F-050** | Check that check is correctly detected for the White King |  |  |
| **SE-F-051** | Check that check is correctly detected for the Black King |  |  |
| **SE-F-052** | Check that the game detects when the White King is in checkmate |  |  |
| **SE-F-053** | Check that the game detects when the Black King is in checkmate |  |  |
| **SE-F-054** | Check the name of the winning User is displayed in the 'Game Over' screen |  |  |
| **SE-F-055** | Check the Main Menu button appears in the "Game Over" screen |  |  |
| **SE-F-056** | Check that the game ends when White chooses to resign |  |  |
| **SE-F-057** | The game ends when Black chooses to resign |  |  |
| **SE-F-058** | White can call a draw and Black can accept |  |  |
| **SE-F-059** | Black can call a draw and White can accept |  |  |
| **SE-F-060** | White can call a draw and Black can decline |  |  |
| **SE-F-061** | Black can call a draw and White can decline |  |  |
| **SE-F-062** | White Player can choose to quit the game at any time |  |  |
| **SE-F-063** | Black Player can choose to quit the game at any time |  |  |
| **SE-F-064** | Can the White Player exit the pause menu |  |  |
| **SE-F-065** | Can the Black Player exit the pause menu |  |  |
| **SE-F-066** | Does the option to replay a previous game appear |  |  |
| **SE-F-067** | Are all saved games shown |  |  |
| **SE-F-068** | Can the User select a game to load |  |  |
| **SE-F-069** | Are all the pieces in the correct positions |  |  |
| **SE-F-070** | Are all the pieces that were removed from the board still removed |  |  |
| **SE-F-071** | Does the game load the JavaFX for if the White/Black King is in check |  |  |
| **SE-F-072** | Does the game load the correct Usernames assigned to the correct colours |  |  |
| **SE-F-073** | Can the White Player choose to move forwards and backwards through the game on their turn |  |  |
| **SE-F-074** | Can the Black Player choose to move forwards and backwards through the game on their turn |  |  |
| **SE-F-075** | The game is saved in its entirety when a User chooses to quit |  |  |
| **SE-F-076** | The game is saved and does not overwrite another saved game |  |  |
| **SE-F-077** | Check if the game is saved after every move |  |  |
| **SE-F-078** | Check if the program is closed during a game, was the last move saved |  |  |
| **SE-F-079** | Check if the program crashes during a game, was the last move saved |  |  |
| **SE-F-080** | Check to see if program responds correctly when the user attempts to load a save file with the wrong extension |  |  |
| **SE-F-081** | Check to see if program responds correctly when the user attempts to load a save file in an incorrect format |  |  |
| **SE-P-001** | Check the response of the program to user input (Should take under a second) |  |  |
| **SE-P-002** | Check if the program works on Information Services PC’s |  |  |
| **SE-E-003** | Check the appearance of the interface resembles Microsoft Windows standards. |  |  |

REFERENCES

[1] Cooper. G, Foy. K, Baker. D, Enache. A, “Software Engineering Group 17 Test Specification”, 1.6, SE\_GP17\_UISpecification, 24th April 2023

DOCUMENT HISTORY

| *Version* | *Issue No.* | *Date* | *Changes made to document* | *Changed by* |
| --- | --- | --- | --- | --- |
| 0.1 | N/A | 28/04/23 | N/A – New Document | DUB4 |