Immagine che contiene diagramma, schizzo, bianco, linea

Descrizione generata automaticamente

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| USE CASE #1 | |
| Name | Main menu |
| Actors | User |
| Brief Description | The user opens the application. |
| Preconditions: | none |
| Basic flow | The home screen is displayed and the user can select a level or read some info about the game before playing it. |
| Alternate flows | none |
| Postconditions | Home screen is displayed |

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| USE CASE #2 | |
| Name | Select Level |
| Actors | User |
| Brief Description | The user chooses one of the 5+1 configurations. |
| Preconditions: | none |
| Basic flow | User selects one of the 5+1 levels and clicks on “play”. |
| Alternate flows | User doesn’t select a level. Level 1 is selected by default |
| Postconditions | The level selected is displayed. |
| Note | The level can also be selected during a game (after use case #4) clicking the “level” button and choosing one of the 5 options.  It equals to starting a new game (use case #4) |

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| USE CASE #3 | |
| Name | Info |
| Actors | User |
| Brief Description | Information about the game are shown |
| Preconditions: | none |
| Basic flow | User clicks on “info” and information about the game and rules are shown |
| Alternate flows | none |
| Postconditions | none |

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| USE CASE #4 | |
| Name | Play game |
| Actors | User |
| Brief Description | The user clicks on the “play” button |
| Preconditions: | none |
| Basic flow | A new game starts and the board is displayed |
| Alternate flows | none |
| Postconditions | The game board with the selcted configuration  is displayed and the user can move the pieces |

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| USE CASE #5 | |
| Name | Move |
| Actors | User |
| Brief Description | The user can move the pieces according to the game rules |
| Preconditions: | A piece has to be selected |
| Basic flow | The user drags the pieces to the free places |
| Alternate flows | The user tries to drag the blocks outside the board, to move them diagonally or to overlapping them and the piece won’t move |
| Postconditions | The moves counter increments and now the user has the opportunity to undo or save |

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| USE CASE #6 | |
| Name | Undo |
| Actors | User |
| Brief Description | User decides to undo a move. |
| Preconditions: | The moves counter can’t be 0, at least one move must have been performed |
| Basic flow | User clicks on “undo” and the board returns to the previous configuration |
| Alternate flows | Moves counter is 0 and can’t decrement. The board configuration doesn’t change. |
| Postconditions | The moves counter decrements by one and the board configuration returns to the previous condition |

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| USE CASE #7 | |
| Name | Settings |
| Actors | User |
| Brief Description | The user clicks on the “setting” button |
| Preconditions: | A game must have started, can’t do it from the main menu |
| Basic flow | User clicks on “settings” and 3 different options are displayed. He can save the game, load a saved one or return to the main menu |
| Alternate flows | User doesn’t select any of the 3 options |
| Postconditions | Use case #8, #9 or #10 |

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| USE CASE #8 | |
| Name | Save |
| Actors | User |
| Brief Description | The current board configuration gets saved |
| Preconditions: | Use case #7 |
| Basic flow | After making some moves, the user saves the configuration |
| Alternate flows | The user saves before making any move. That equals saving the selected configuration |
| Postconditions | The configuration is saved and can be loaded (use case #9) |

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| USE CASE #9 | |
| Name | Load |
| Actors | User |
| Brief Description | The saved configuration gets loaded |
| Preconditions: | Use case #7 and #8 |
| Basic flow | User saves a game, makes sono moves and then loads the saving. The saved configuration is displayed and the moves counter changes too |
| Alternate flows | User tries to load a configuration without saving one before. The display doesn’t change because nothing gets loaded |
| Postconditions | The configuration and the moves counter change |

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| USE CASE #10 | |
| Name | Return to main menu |
| Actors | User |
| Brief Description | The user return to the home screen using the settings. The situation will be the same one as in the use case #1 |
| Preconditions: | Use case #7 |
| Basic flow | The main menu is displayed |
| Alternate flows | none |
| Postconditions | Use case #1 |

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| USE CASE #11 | |
| Name | Reset |
| Actors | User |
| Brief Description | The user return to the home screen using the settings. The situation will be the same one as in the use case #1 |
| Preconditions: | Use case #7 |
| Basic flow | After making some moves the user decides to reset |
| Alternate flows | The user resets the game without making any move, the configuration doesn’t change |
| Postconditions | New game with the same level starts |

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| USE CASE #12 | |
| Name | Next best move |
| Actors | Solver |
| Brief Description | The best possible move is performed automatically |
| Preconditions: | User must be connected to interntet |
| Basic flow | The solver performes the best move |
| Alternate flows | none |
| Postconditions | The configuration chages and moved counter increments by one |

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| USE CASE #13 | |
| Name | Solve all |
| Actors | Solver |
| Brief Description | The game is solved automatically |
| Preconditions: | User must be connected to interntet |
| Basic flow | The pieces move automatically until the 2x2 square teaches the winning position |
| Alternate flows | Stop (use case #14) |
| Postconditions | Win (use case #15) |

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| USE CASE #14 | |
| Name | Stop |
| Actors | User and Solver |
| Brief Description | User stops the automatic solving |
| Preconditions: | Use case #13 |
| Basic flow | After letting the solver move some pieces the user decides to stop him |
| Alternate flows | none |
| Postconditions | The solver stops solving |

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| USE CASE #15 | |
| Name | Win |
| Actors | User and/or solver |
| Brief Description | User (or solver) wins the game |
| Preconditions: | The 2x2 square is moved to the winning position |
| Basic flow | User (or solver) moves the pieces until the 2x2 reaches the winning position |
| Alternate flows | User isn’t able to make the 2x2 square go to the winning position |
| Postconditions | Restart (same as use case #11) or  go back to the main menu (use case #1) |