Homework

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Chess game

Project idea : Making a chess game using C++ and creating a simple GUI with Qt for the chessboard . First a menu box will open . There we have the option to start a new game or to exit the game . If we click on the new game button , a new box with a chessboard and figures on the right place will appear. It will show a standard 8*8 chessboard with two additional rows and columns for the board positions , left and right column from 1-8 , upper and bottom row from A-H. At the game mode , it will always display which players move or turn it is , by displaying the color of the players figures , perhaps if white begins at the start it will always display white . The player can choose figures by clicking on them and then click on the position where he wants his figure to move , if the move is legal it will execute , else not and he has to change the move or figure .The game will continue until one player checkmates the other one . The only other possible outcome is a draw by stalemate. Stalemate is when player whose turn it is to move has no legal move and is not in check. When the game finishes the only two options a player has is to play a new game or to exit the game . After every move a player makes it will be shown in a table (I am thinking to put it at the right side of the box) . In the game mode we can always choose a new game options , which will start a new game. Also we have the option to exit the game. Regarding the chess rules I want to apply the most common and known rules . Example castling I will implement because it is highly used and very common I chess games , otherwise espasnt which most amature players ont even know. It will be a game for amature player with beginner rulers.

Chess rules

Chess is a strategic board game in which two players take turns moving pieces on a board. The aim of the game is to checkmate the opponent, that is to attack his king so that neither defense nor escape is possible. On the chessboard are at the beginning of a game a total of 32 chess pieces, 16 white and 16 black. Both players have the following chess pieces available , eight figures in the narrower sense:

King , Queen , 2 rooks , 2 knights , 2 bishops and 8 pawns.

Rules of movement for the figures:

-The king can move horizontally, vertically or diagonally on the immediately adjacent field.

-The queen may move as far as possible in horizontal, vertical and diagonal direction.

-A rook may move arbitrarily far on lines and rows, in horizontally and vertically.

-Bishops move in diagonal direction as far as possible over the board.

-The knight may move to one of the squares closest to his stand, but not on the same row, column, or diagonal.

-The pawn can move one step forward if the target field is empty, and eat in diagonal.