**What I will demo on Sunday 24th Nov:**  A chess board with all chess pieces on it. And correct pawn moves. Meaning that the pawns will be able to move correctly and capture correctly.

Changes to the proposal: I removed two special chess moves (castling, en passant). I will add visual effects, so that when you click a piece on your turn, the program will indicate all possible moves you can make with that piece.

**15-112 Final Project Proposal by Qasim Nadeem:**

I will make a 2 player chess program. The program will put up a 2-D chess board that will allow two people to play on the same computer, taking alternate turns using the mouse. *Clicking on a piece will indicate (outline/highlight) all possible moves you can make with that piece.*

**Chess** is a two-player [strategy](http://en.wikipedia.org/wiki/Abstract_strategy_game) [board game](http://en.wikipedia.org/wiki/Board_game) played on a [chessboard](http://en.wikipedia.org/wiki/Chessboard), a checkerboard with 64 squares arranged in an eight-by-eight grid. Each player begins the game with 16 [pieces](http://en.wikipedia.org/wiki/Chess_piece): one [king](http://en.wikipedia.org/wiki/King_(chess)), one [queen](http://en.wikipedia.org/wiki/Queen_(chess)), two [rooks](http://en.wikipedia.org/wiki/Rook_(chess)), two [knights](http://en.wikipedia.org/wiki/Knight_(chess)), two [bishops](http://en.wikipedia.org/wiki/Bishop_(chess)), and eight [pawns](http://en.wikipedia.org/wiki/Pawn_(chess)). Each of the six piece types [moves](http://en.wikipedia.org/wiki/Chess#Movement) differently.

Pieces are moved to either an unoccupied square or one occupied by an opponent's piece, which is captured and removed from play. All pieces capture opponent's pieces by moving to the square that the opponent's piece occupies (with the sole exception of [*en passant*](http://en.wikipedia.org/wiki/En_passant)). A player **may not make any move** that would put or leave his king under attack. If the player to move has no legal moves, **the game is over**; it is either a [checkmate](http://en.wikipedia.org/wiki/Checkmate) (a loss for the player with no legal moves) if the king is under attack, or a [stalemate](http://en.wikipedia.org/wiki/Stalemate) (a draw) if the king is not.

Each [chess piece](http://en.wikipedia.org/wiki/Chess_piece) has its own style of moving.

* The [king](http://en.wikipedia.org/wiki/King_(chess)) moves one square in any direction.
* The [rook](http://en.wikipedia.org/wiki/Rook_(chess)) can move any number of squares along any rank or file, but may not leap over other pieces.
* The [bishop](http://en.wikipedia.org/wiki/Bishop_(chess)) can move any number of squares diagonally, but may not leap over other pieces.
* The [queen](http://en.wikipedia.org/wiki/Queen_(chess)) combines the power of the rook and bishop and can move any number of squares along rank, file, or diagonal, but it may not leap over other pieces.
* The [knight](http://en.wikipedia.org/wiki/Knight_(chess)) moves to any of the closest squares that are not on the same rank, file, or diagonal, thus the move forms an "L"-shape: two squares vertically and one square horizontally, or two squares horizontally and one square vertically. The knight is the only piece that can **leap over** other pieces.
* The [pawn](http://en.wikipedia.org/wiki/Pawn_(chess)) may move forward to the unoccupied square immediately in front of it on the same file, or on its first move it may advance two squares along the same file provided both squares are unoccupied; or the pawn may capture an opponent's piece on a square diagonally in front of it on an adjacent file, by moving to that square. The pawn can be promoted to a Queen/bishop/rook if it reaches the last rank on the opposite side of the board.