Board Game Analyzer and Board Game Playback Machine

High Level Requirements

Board Game Analyzer

The Board Game Analyzer will generate complete game graphs for various board games and board dimensions.

The games will be simple two player two dimensional board games composes of squares, like Checkers, Reversi, Connect Four, etc.

The game graphs will contain the best prognosis for every possible move for every possible board situation. This prognosis will be propagated back from the end game board situations. If all the moves for the current board situation have a path to a win

It will also have a GUI to enable observation of the games in progress.

In order to enable validation of the game rules, the GUI will have an option to display every move as it happens. The GUI will display the piece numbers on the board display. The GUI will display the board and the currently placed pieces using selectable colors for the pieces.

In order to enable optimal performance, the GUI will have an option to not display the game progress.

In order to allow the user to monitor progress, the GUI will have options to display the game progress every few seconds.

Board Game Playback Machine

The Board Game Playback Machine will allow the user to play an entire game, either as both players or as one player against the game graph.

The UI will allow the user to choose the game and choose the board dimensions. The UI will supply these options in dropdown style and will only allow options which have a corresponding game graph.

The UI will display an indicator to identify the current place in the game graph for debugging purposes.