

C++ Programming Project 3

Create a game engine with simple AI for playing Gomoku game.

<http://en.wikipedia.org/wiki/Gomoku>

The engine should not have a graphical interface, instead it should use

<http://gomocup.wz.cz/download.php?filename=http%3A%2F%2Fpetr.lastovicka.sweb.cz%2Fpiskyork.zip>

from

<http://gomocup.wz.cz/gomoku/download.php>

for displaying.

The communication should be implemented by console input/output (cin/cout) by means of protocol

<http://petr.lastovicka.sweb.cz/protocl2en.htm>

<http://gomocup.wz.cz/gomoku/info.php>

It is enough to implement only mandatory commands.

1. Start with random answers of your engine to set it up working with the GUI program.
2. Add some heuristic to make you program play better.
3. Try to use tree search algorithm for better results of your engine (eg. Minimax search or AlphaBeta pruning).

<http://en.wikipedia.org/wiki/Minimax>

http://en.wikipedia.org/wiki/Alpha%E2%80%93beta_pruning

Use C++ classes to model the problem (e.g. class Board, class Game, class Engine, class Search, class Tree, class Node or others).