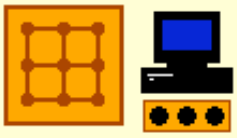
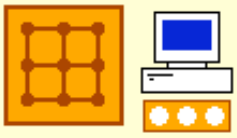
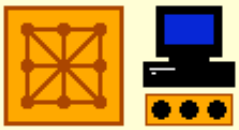
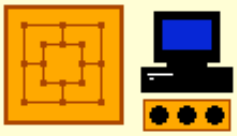
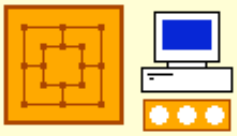
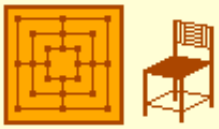
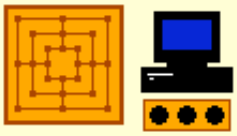
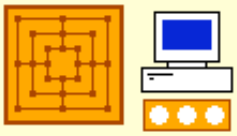
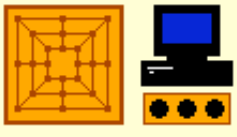
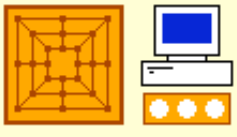
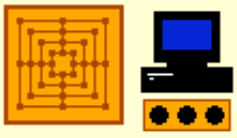
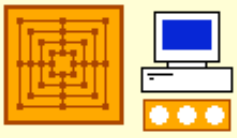
Morris Games

A Traditional European Pastime

Choose game and opponent to play:

	Single-Seat	Computer plays Black	Computer plays White
Three-Men's Morris			
Yih			
Six-Men's Morris			
Nine-Men's Morris			
Twelve-Men's Morris (small board)			
Twelve-Men's Morris (large board)			

Morris games are a type of game popular in Europe during the Middle Ages. The most common was Nine-Men's Morris, although Three-Men's Morris, Six-Men's Morris, and Twelve-Men's Morris were also played. The board was commonly found carved on the back of other game's boards (from which we get one of the descriptions: "The game on the other side of the board"). The board has also been found carved on the tops of barrels, on ship's timbers, scratched onto flat rocks, and even carved on church pews.

Yih is a Chinese version. It's played with nearly the same rules as the European Morris games.

Rules

Each player starts with nine (or three, six, or twelve) pieces ("men"). At the start of the game, there are no pieces on the board. The pieces may rest at any dot on the board, where the lines intersect. The object of the game is to capture all but two of the opponent's pieces.

Players alternate turns. In a turn, the player may either place a piece on the board, or move a piece that is already on the board. A piece may be placed at any open position on the board. A piece may be moved along a line on the board to the next unoccupied position.

Players capture the opponent's pieces by forming "mills." A mill is three or more pieces of the same color in a row, along a board line. For each mill formed, the player may capture one opponent's piece; it is removed from the board and cannot return. It is possible to form two mills in one turn, in which case two pieces are captured. To prevent a single mill from being a decisive advantage, a mill is not counted if it is formed by moving a piece from a mill and moving it back in the immediately following turn.

When one player has two or fewer pieces left to place or on the board, the game is over, and that player has lost.

About the Applet

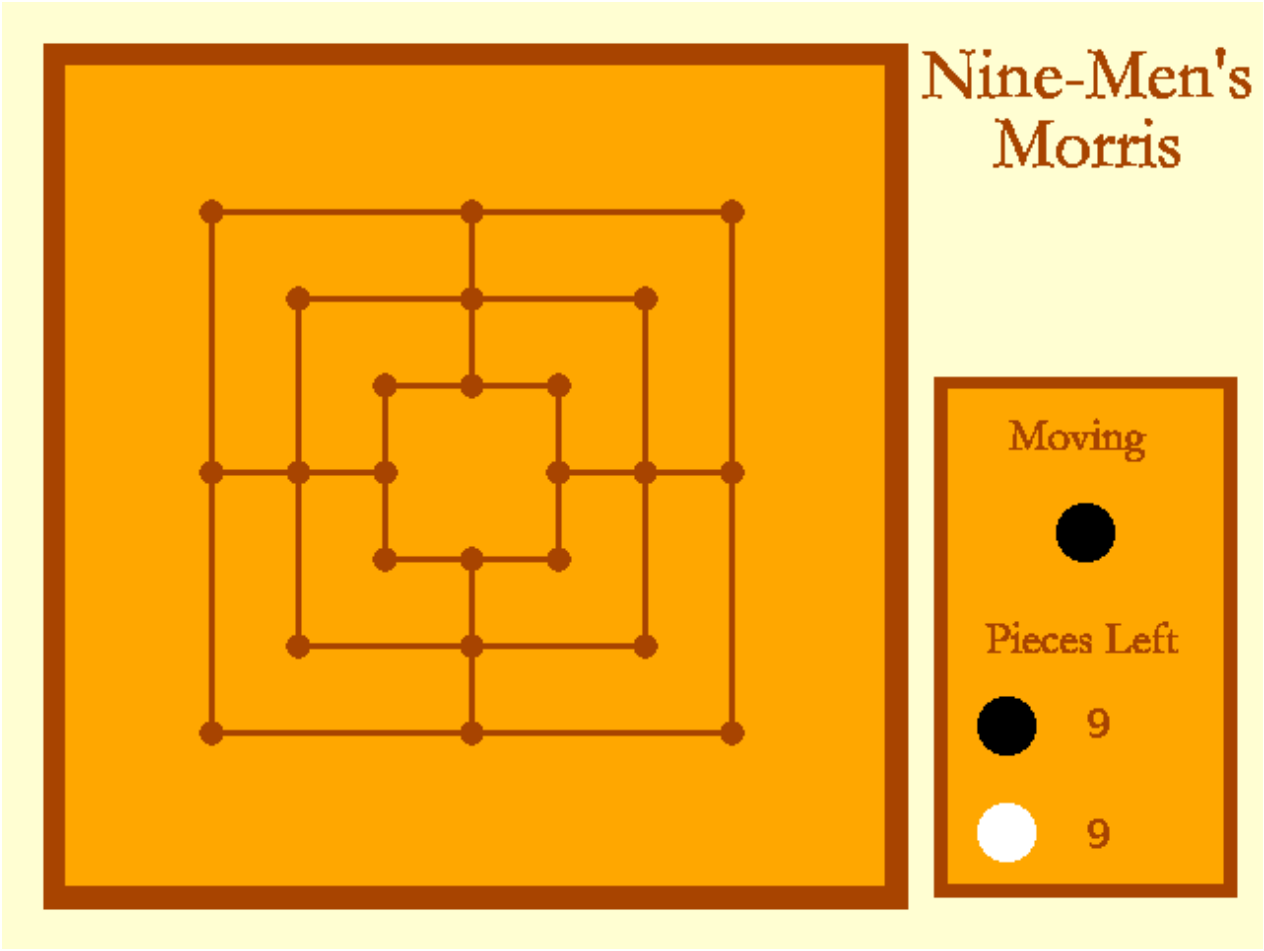
The applet is coded in Java and compiled with Sun 1.1.5 JDK. It appears to work properly using Sun's applet viewer, Netscape Communicator 4.04, and in Microsoft Explorer 4.0 (Netscape Communicator 4.04 requires the Java 1.1.4 patch, available from Netscape's download area). Due to an apparent bug in Netscape Navigator, the sounds and images download separately even though they are available in the .jar file. The program can also be run as an application, although sound is not available in this case.

The AI player uses a variable-depth lookahead algorithm with a very simple evaluation function. The depth is dynamically adjusted to use a constant amount of time to select a move, which means that it will play better on faster machines and in smaller games. If you'd like to write a better AI player and have it appear on these pages, or if you'd like to contribute better art or sounds, contact the author.

Currently, the applet is available in hotseat and AI versions only. The architecture was designed to allow games with two human players on separate machines, and this may be available in the future.

Nine-Men's Morris

Computer Plays Black



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