

Mancala Stages of Implementation

1. Step 1. Display the board and allow the system to perform one move as selected by the user.
2. Step 2. Allow the turn movement to alternate between the players - with no AI involvement. Correctly detect the repeated turn and special case when stones are placed in the scoring hole.
 - (a) Correctly detect end game.
 - (b) Correctly detect when a user can go again.
 - (c) Correctly detect when a user puts pieces in his store by landing in their own hole when opposite a non-empty opponent hole. Be careful, there are several test conditions here to get correct.
3. Step 3. Successor function (half-ply function). Perhaps the toughest piece as a single state can have a branching factor that grows quite nicely.
4. Step 4. Build the minimax solution. Allow the AI to play against you. Come up with an evaluation function and cutoff if necessary. A simple evaluation function could be based simply on the score.