Software Engineering Backgammon Game Rules
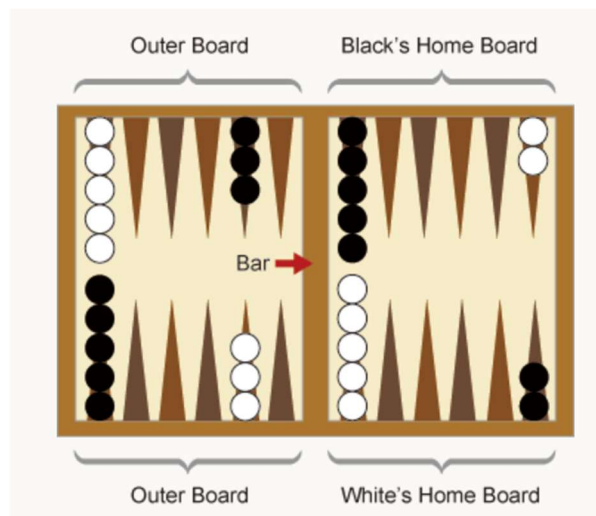
Backgammon is a two-player game that is played on a board with checkers and dice. Each player ha 15 checkers of their own colours and a pair od dices.

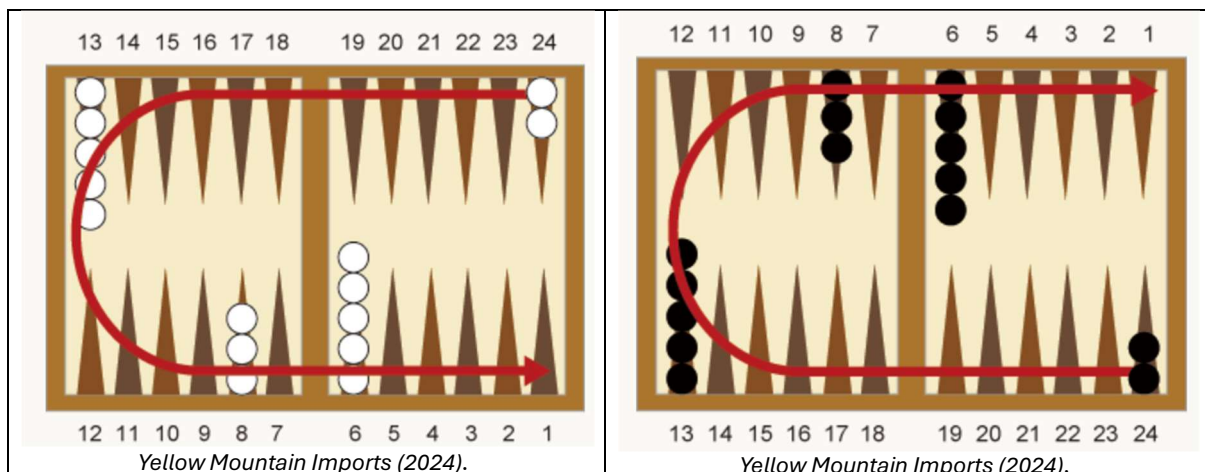The objective of the game is to remove all checkers from the board.

The board consists of 24 long triangles called points or pips. The triangles alternate in colour and are divided into four quadrants of 6 triangles each. The four quadrants are the players home board and outer board, and the opponents home board and outer board.

Yellow Mountain Imports (2024).

The home board and outer board are separated by a divider down the middle refereed to as the bar. The starting positions of the pieces are arranged as shown in figure (1). The players points are numbered start at 24 in the opponent's home board and ending at 1 in the players own home board.

The aim is to move all of one's own checkers to the home board and then remove the pieces from the board entirely. The players move their checkers in opposing directions following a horseshow path as shown in the figure below.

Yellow Mountain Imports (2024).

Yellow Mountain Imports (2024).

Game Play:

To begin, each player rolls one die, and the player with the higher roll goes first, using both numbers shown on the dice. If both players roll the same number, they continue rolling until there's a higher roll. After this, players take turns, rolling two dice at the start of each turn. The dice should always be rolled together and must land flat on the designated right side of the board. If a die lands outside the board area or on a checker, it must be re-rolled.
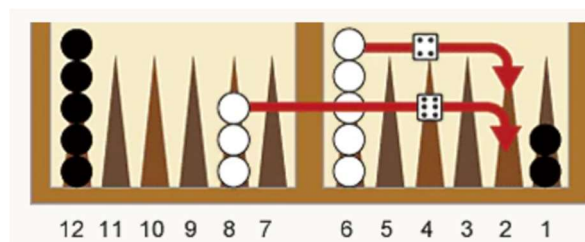
Moving

The dice roll determines how many points the player is supposed to move its checker. The checker always moves forward following the horseshoe path towards the player's home board.

A point that is not occupied by two or more opposing checks is an open point. When moving a checker, it may land only on an open point.
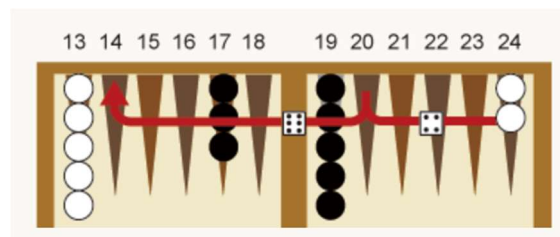
Each of the dices constitute two separate movements. EX: if a player rolls a 3 and 5, they may move one checker 3 spaces to an open point and another checker 5 spaces to an open point

This is shown in the following image:

Yellow Mountain Imports (2024).

The player may also move the same checker twice (if each movement is to an open point). This is also shown in the image below.

Yellow Mountain Imports (2024).

Double Rolls

When a double is rolled the numbers on the dice are played twice.
       EX: player rolls two 5s. The player may move their checkers five points four times.
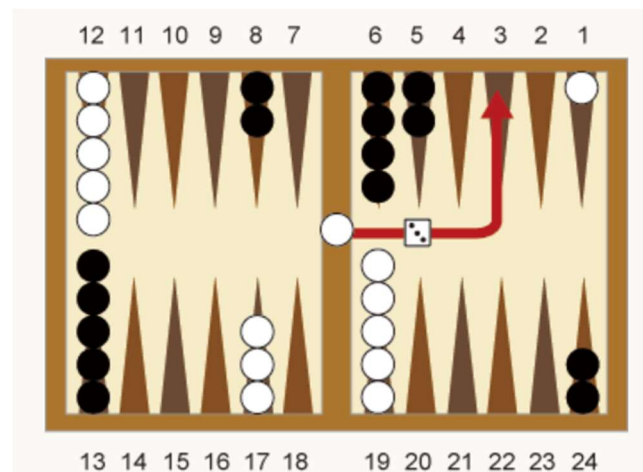

Hitting

An open point with one opposing checker is a blot. When a checker is moved onto a blot, the blot is hit and the opposing checker that has been hit is placed on the bar.

When a player has one or more checkers on the bar, he must first re-enter them onto the opponent's home board. A checker enters by rolling two dice and moving it to the corresponding point of one of the numbers on the opponent's home board.

If the checker(s) on the bar cannot enter into an open point, the player loses their turn and the checker(s) remains on the bar. A player cannot move any other piece until all his checkers are off the bar. If a player is able to enter some but not all of his checkers off the bar, his turn is finished. If a player's checker(s) have been moved off the bar, any unused number must be played.

This is shown in the image below.

Yellow Mountain Imports (2024).

Bearing off

When all of a player's checkers are in their home board, they can begin a process of removing them called bearing off. This is done by rolling a number corresponding to a point with a checker residing on it.

If no checker can bear off with the number(s) rolled, the player must make a legal move(s) with a checker(s) from a higher point.

Reference

- Yellow Mountain Imports (2024). *How to Play Backgammon*. [online] Yellow Mountain Imports. Available at: https://www.ymimports.com/pages/how-to-play-backgammon?srsltid=AfmBOor8dqi5kmiP3_l9Vi89nM4lrzhUE0QaxrPPzVVHW5CFhway4oNE [Accessed 27 Oct. 2024].