Kalaha – A Human v/s Computer Game

Developed a fully functional Java implementation of the ancient board game Kalaha. Primarily, it was an exercise in understanding the basics of Artificial Intelligence and Game Theory. The game runs on a modified version of the Minimax and Alpha Beta pruning algorithms.

We look for possible moves in the game tree upto levels. We planned on going deeper but at this stage itself, the game was unbeatable most of the time for most of the players! Since the tree formed for minimax was pretty large, we used Alpha Beta pruning to cut off some sections of the graph to speed up the time.

This was a terminal game we developed in 3rd semester. This game was our choice of topic for class project of Data Structures course.