A Variant for Chess Using an On-line Multi Player Approach

M.K.S Anupama\textsuperscript{1}, K.G. Galagedara\textsuperscript{2}, D.H.G. Hettiarchchi\textsuperscript{3}, L. H. A.N.D. Kumari\textsuperscript{4}, S.V.K. Samaraweera\textsuperscript{5}, Dileka Dias\textsuperscript{6}, A. S. Karunananda\textsuperscript{7}

Faculty of Information Technology, University of Moratuwa, Sri Lanka

anufit6@gmail.com\textsuperscript{1}, kawmada85@gmail.com\textsuperscript{2}, dasuni1985@gmail.com\textsuperscript{3}, nadeefit6@gmail.com\textsuperscript{4}, shrideshism@gmail.com\textsuperscript{5}, dileeka@itfac.mrt.ac.lk\textsuperscript{6}, asoka@itfac.mrt.ac.lk\textsuperscript{7}

Abstract - Chess is one of the world’s most widespread games. We propose the novel concept of ‘group chess’, with the objective of using information technology as an educational aid for novice chess players, as well as for experienced players to play as groups. In the proposed game, up to thirty players can play chess in two groups. The player who makes the best move at each turn is awarded with marks. Finally the player with the highest marks wins. Artificial intelligence and networking technologies are used in the system. The Alpha Beta pruning algorithm is used to find the best movement out of a set of given inputs. This is a new adaptation of the Alpha Beta pruning which is normally used to find the best possible move. We propose this game for chess learners as well as a novel approach to the game for experienced players. The concept of ‘group chess’ will direct future development of the game of chess towards a new variant. The game has been named Sanuthi Prayathna.