Title: Alhambra

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Abstract: The bachelor thesis deals with the implementation of the board game Alhambra. Besides of the implementation of the game rules, program includes also a graphical user interface. The game can be played by two to six players who take turns at one computer. Further we deal with an artificial intelligence, against which we can play. Decision logic of the artificial intelligence is made by using the evolution algorithm and machine learning.

Keywords: Alhambra, game, artificial intelligence, evolution algorithm