# Game-Playing (Chess) Lab Write-Up

1. Our algorithm performs a Board Evaluation to determine what moves will result on the best cost advantage to us. Two specific costs are analyzed:

* Kill cost: This is the value associated with each unique chess pieces. For example, a queen has a higher value than a knight, which in turn has a higher value than a pond.
* Threatened cost: If a move by the opponent will result in any of our chess pieces being threatened, the move’s cost is increased.

1. Flag cost. This cost correlates to the cut-off points:

* Checkmate flag: This is a terminal cut-off cost. If a checkmate flag is set as the mini-max algorithm runs, we return immediately.
* Stalemate flag: This is a depth cut-off cost. If a stalemate flag is set as the mini-max algorithm runs, we do not go any deeper with the current state but instead return one level and continue exploring for other better moves.

1. Protection cost: This is a cost that will be implemented in the future.