



## PROJECT SPECIFICATION

**Build a Game-Playing Agent****Game Playing Agent**

CRITERIA	MEETS SPECIFICATIONS
Is adversarial search correctly implemented using iterative deepening, minimax, and alpha-beta pruning?	The minimax and alphabeta functions pass all test cases.

**Submission Includes All Files**

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Submission must contain source code, heuristic report, and research summary report.	All required file included.

## Heuristic Analysis

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Have at least three (3) evaluation heuristics besides <code>null_score()</code> , <code>open_move_score()</code> , and <code>improved_score()</code> been implemented and analyzed?	At least three evaluation functions are implemented and analyzed.
Has the performance of agents against the testing agents been adequately described?	A brief report lists (using a table and any appropriate visualizations) and verbally describes the performance of agents using the implemented evaluation functions. Performance data includes results from <code>tournament.py</code> comparing (at a minimum) the best performing student heuristic against the <code>ID_Improved</code> agent.
Does the report make a recommendation about the best evaluation function, and is this recommendation adequately justified?	The report makes a recommendation about which evaluation function should be used and justifies the recommendation with at least three reasons supported by the data.

## Paper Summary

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Completeness	The write up is approximately 1 page (500 words) and includes a summary of the paper (including new techniques introduced), and the key results (if any) that were achieved.

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**Suggestions to Make Your Project Stand Out!**

Develop a heuristic that consistently outperforms AB\_Improved, and presents a plausible explanation for the improved performance in the analysis.

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[Student FAQ](#)