**PROJECT PROPOSAL**

*gamBIT*

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## Project Abstract

What the product does and how it does it from a user point of view – at a high level. (You can include screenshot mockup of the interface)

*The primary objective of this project is to implement a chess-playing AI that combines fundamental chess rules and tactics with AI algorithms to make strategic decisions during gameplay. The AI will be based on the minimax algorithm with alpha-beta pruning, allowing it to explore and evaluate different move sequences efficiently while considering potential opponent responses.*

## Conceptual Design

There will need to be a main chess engine. This handles basic chess game fundamentals, including wins/losses, moves, and pieces being taken down. The engine will be powered by an AI engine that is primarily ran by the minimax algorithm.

## Proof of Concept

https://github.com/jmfernandes/robin\_stocks

## Background

The background will contain a more detailed description of the product and a comparison to existing similar projects/products. Proper citation of sources is required. If there are similar open-source products, you should state whether existing source will be used and to what extent. If there are similar closed-source/proprietary products, you should state how the proposed product will be similar and different.

## Required Resources

Required resources include a Python IDE