

INTRO/ABSTRACT

A novel chess game based on the standard chess ruleset, designed to be intuitive for players at all levels. It features multiple AI models that players can choose from, each with unique decision-making criteria resulting in a distinct gameplay experience depending on the selected model. The AI chooses the move with the best evaluation based on the algorithm/pipeline the AI uses to determine the best move to make against the player. An online PvP mode is also available, allowing two players to connect using a generated lobby code and play against one another. A local PvP game-mode is also provided to allow a player to play with another on the same computer.

METHODS

Developed on a schedule of Biweekly milestones. Every feature was tested as it was completed.

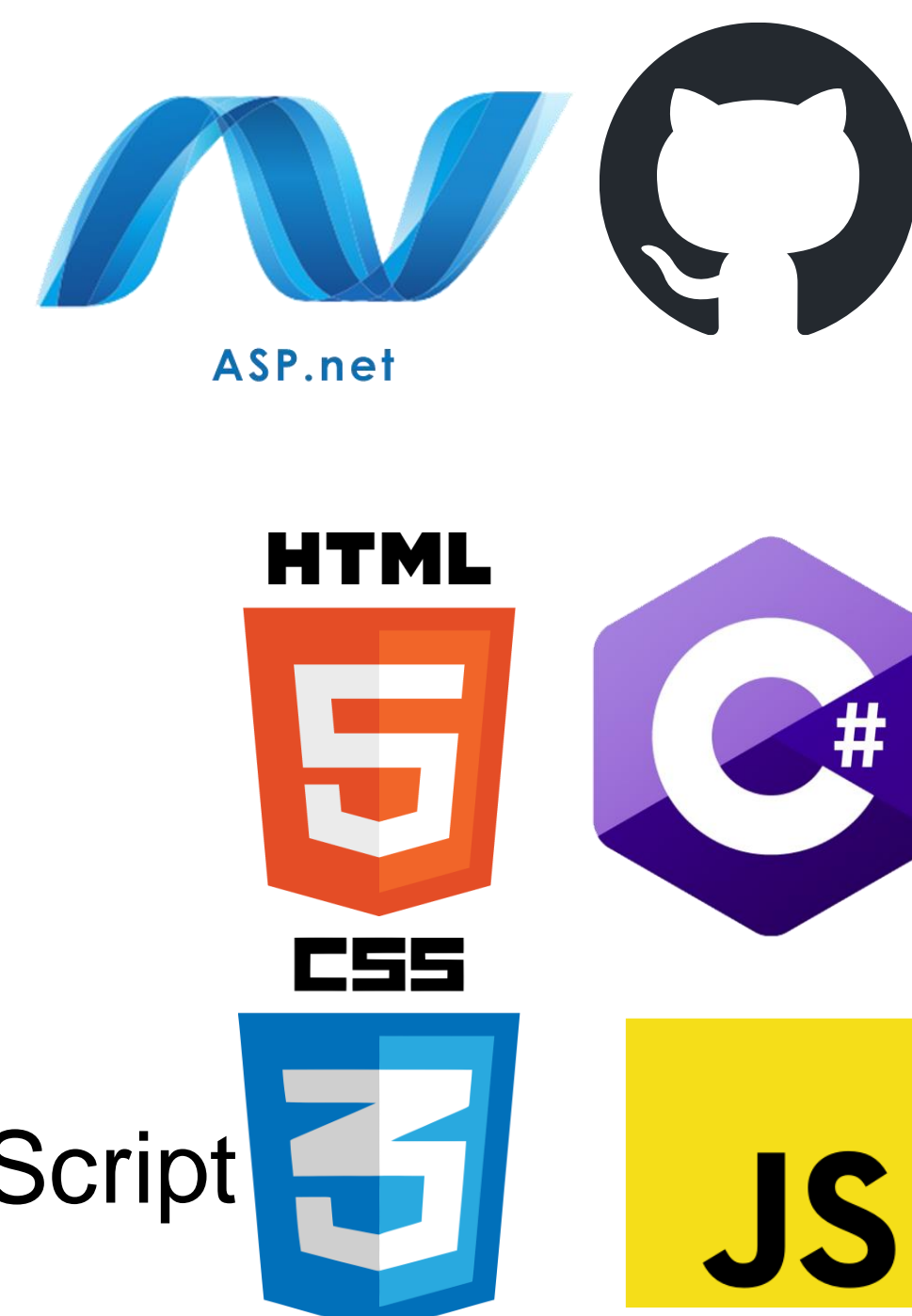
IDE: Visual Studio

Framework: Asp.net

Backend: C#

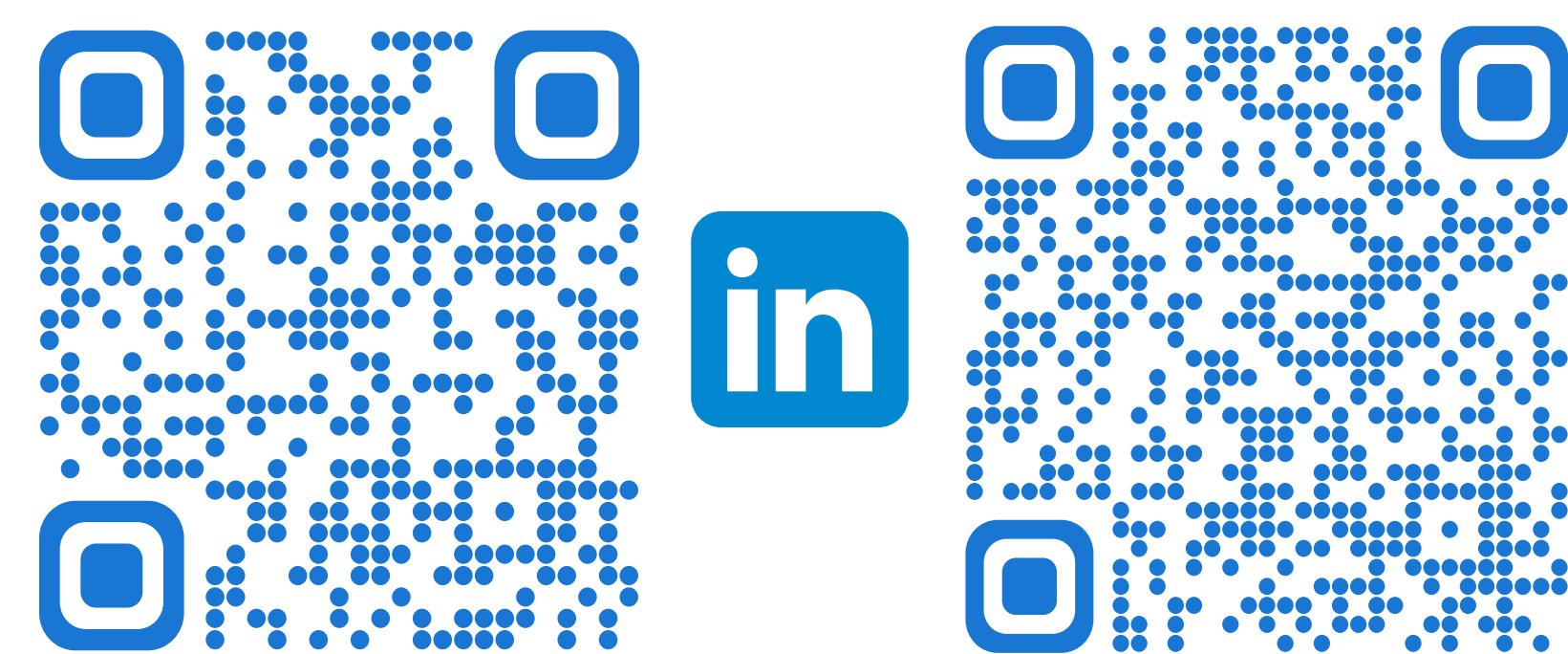
Frontend: HTML, CSS, JavaScript

Version Control: GitHub



RESULTS

This Chess game allows a user to play against different types of AI chess players or against their friends in online mode, each built separately in terms of analytical abilities in determining the best move. This allows a player to test their skills against different AI models that the game provides.



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An intuitive Chess game with multiple AI models and Online PvP, giving players the flexibility to choose their preferred playstyle.

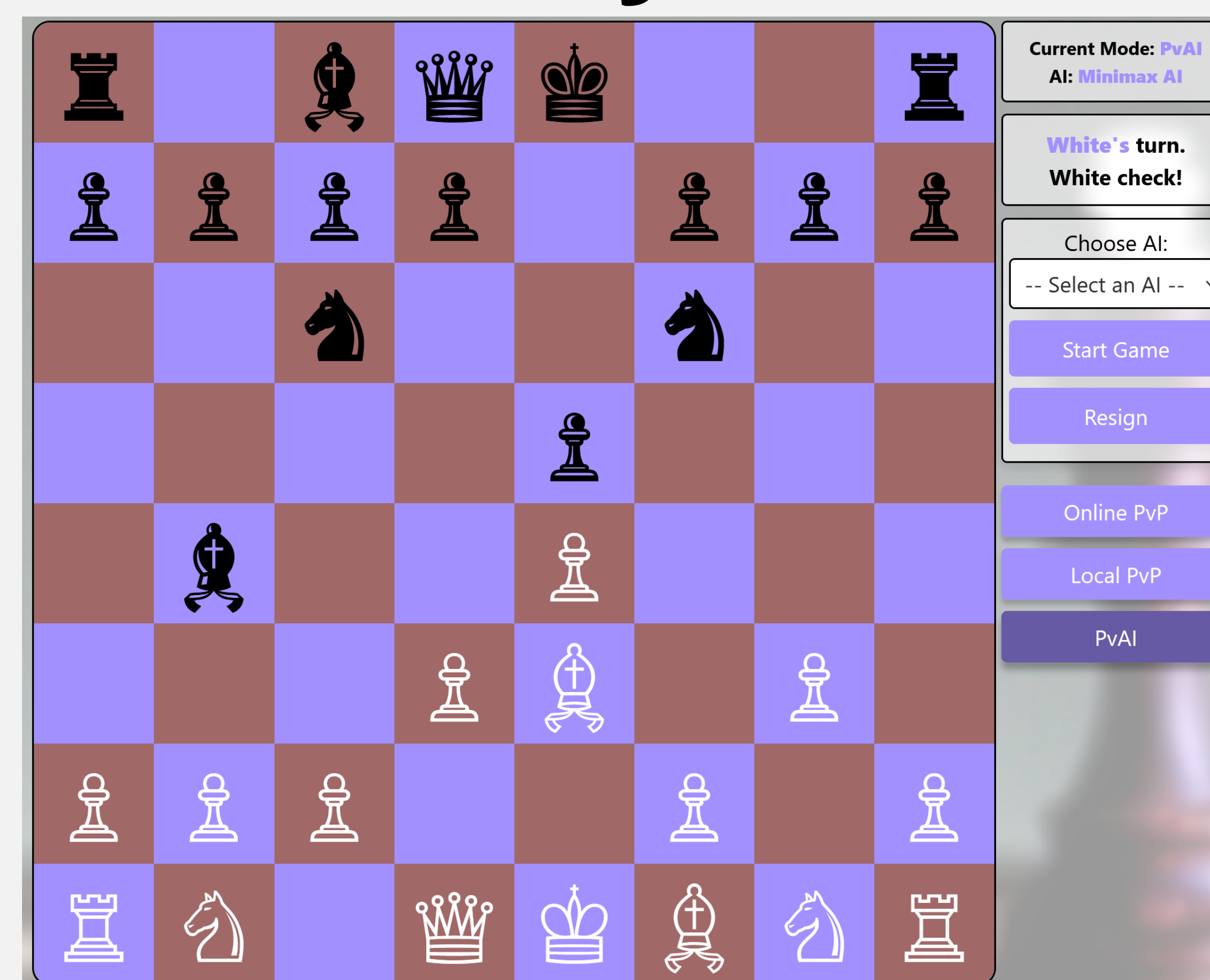


Fig 1: White King is checked by the AI after white blunders.

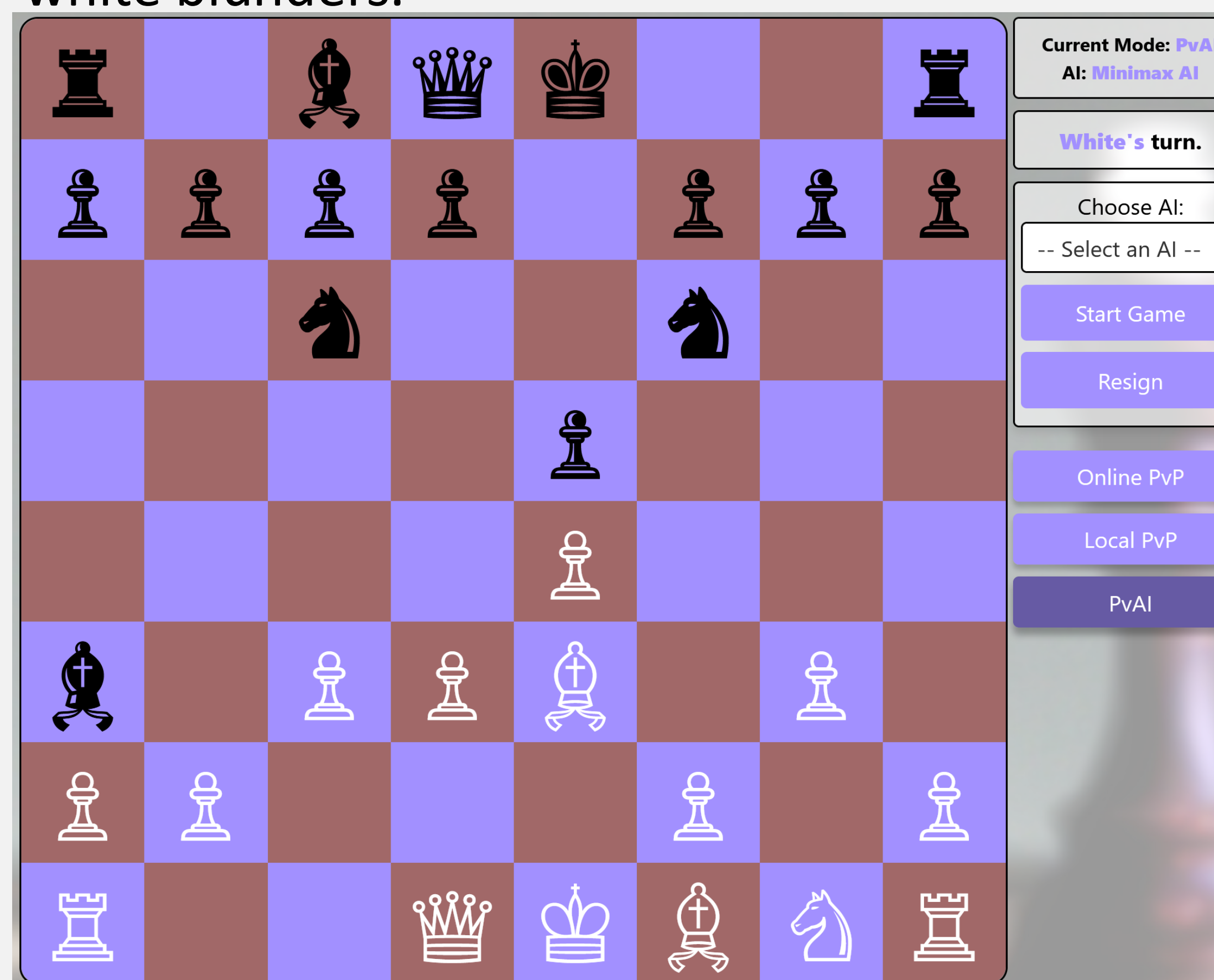


Fig 3: White moves knight from a2 to a3, the AI then captures knight with their bishop.

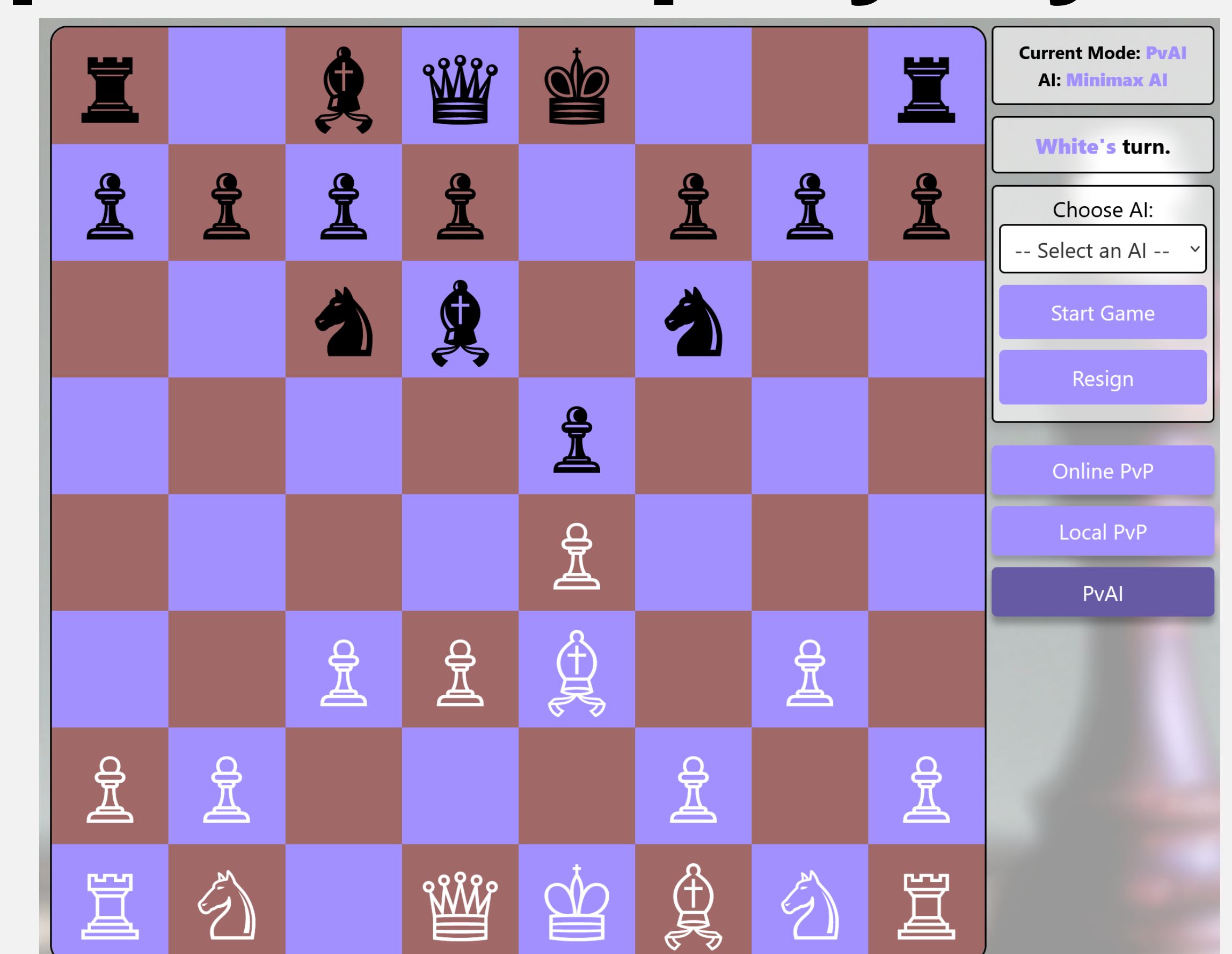


Fig 2: White moves pawn to block the bishop from checking the king, the AI then moves bishop back to prevent capture.

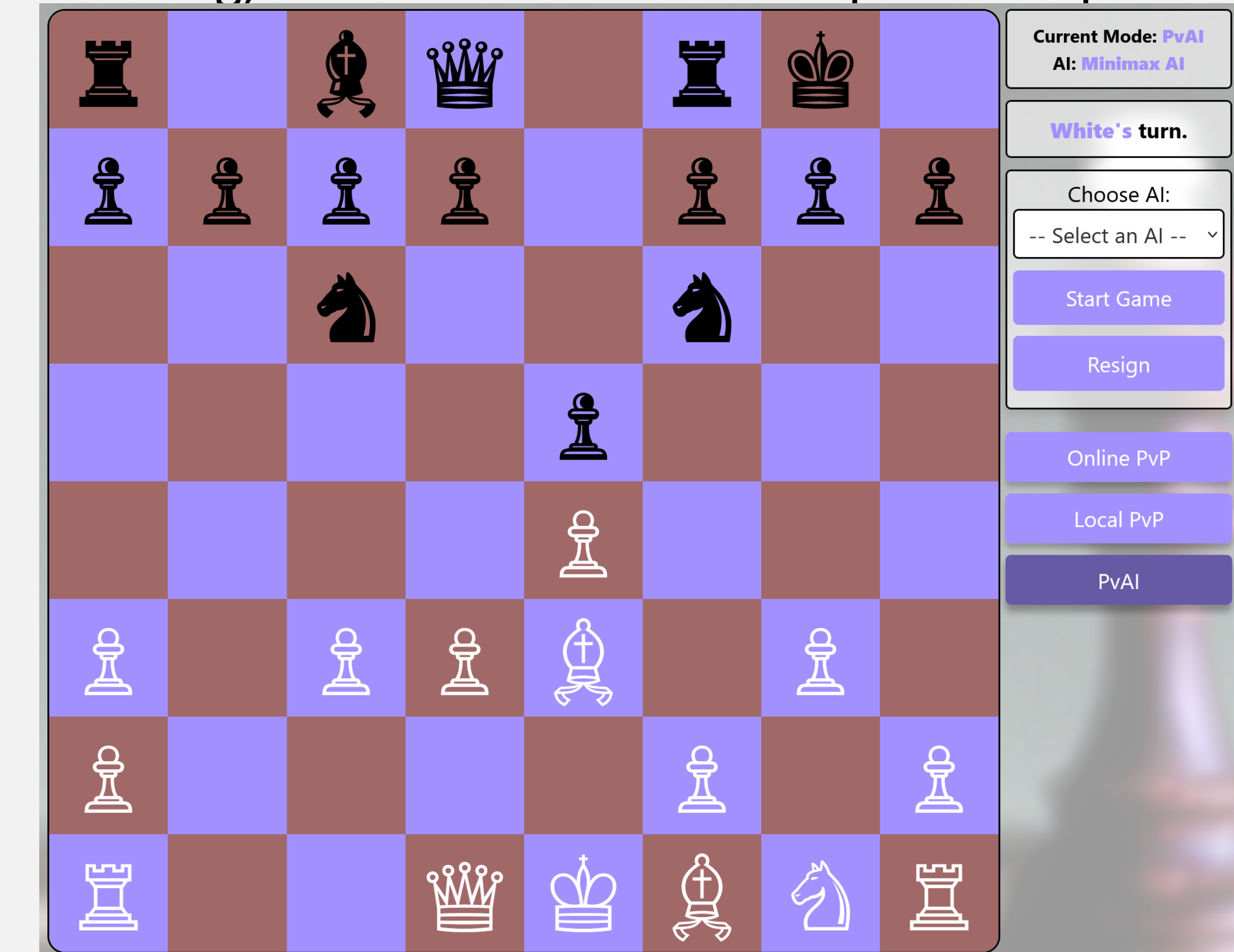


Fig 4: White captures the bishop, then the AI castles their king right after.