**The proposed design of HardAI**

A screenshot of a computer program

AI-generated content may be incorrect.

First, the method initialCandidates() is called to populate the list possibleCodes with all valid combinations. After each guess, the AI stores the lastGuess and the corresponding feedback (numBulls and numCows). These values are then used in updateCandidates() to filter out any guesses from possibleCodes that are inconsistent with the feedback. The method isCandidates() checks whether each possible guess would have produced the same bulls and cows if it were compared with the lastGuess. Finally, generateComputerGuess() selects the next guess from the updated list of candidates. This design ensures that every new guess is logically consistent with all the previous clues, efficiently guiding the AI towards the correct code.