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Project Proposal

For our final project we are planning to create a game of Yahtzee. We will approach the problem by attempting to create an accurate and fun replication of the classic game. This will include scoring, rolling the dice, choosing which dice to keep after a given roll, stopping the player automatically after their third roll, allowing the player to choose which scoring category to apply their roll to, and printing the final score card to the screen. File input and output will include being able to save or load a game mid-progress and saving player statistics over multiple games. The classes involved in our design will be a die class, a scorecard class, and a player class (on which their statistics will be kept). Problems we may encounter could include difficulty in choosing which dice to keep and which to re-roll, how to determine scores and allow the user to choose where to apply their roll, determining when the game should end, saving games to files, and allowing for multi-player games. It may be useful for the program to output the current state of the player's scorecard such that the player is aware of the  categories which they still have available to score in. This could be challenging, as we would likely need to retrieve this data from the files on which their scorecards have been saved. Our program should be true to the rules of the game and be easily usable for a non-computer savvy person.