Yahtzee

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**INTRODUCTION**

The following pages will cover the design process and development of a text based version of the classic American game Yahtzee. Yahtzee is a dice game that was made by Milton Bradley in the early 1940’s. Since its inception it’s been a staple in family games. In real life the game consists of five die, a cup, and something to keep score with. In this version of the game no additional materials will be required other than the necessary equipment to run the program.

**THE BASICS**

**Game Objectives**

Have the most points at the conclusion of the thirteenth round.

**Rules**

The rules are simple. Up to four people may play at one time. Single player is also available. If there are multiple players each person will decide which number they are. Next, players take turns rolling all five die. The player with the largest sum goes first; everyone else follows this order. Each game of Yahtzee consists of 13 rounds. Each player must roll all five die at the beginning of their respective turns. Once all die have been rolled once the player then decides which dice to keep and which to discard. They can reroll all the dice or conclude their turn after one roll. Players may roll up to three times. After the third roll players must enter a score. Although, a score may be entered after the first roll if desired. Once a player his recorded their score their turn is over.

**DESIGN PROCESS**

**Program Functionality**

For this program to be successful it needed to be able to accomplish the following:

1. Create a deck of cards.
2. Ask user for number of players.
3. Ask users for names.
4. Shuffle and deal a deck of cards.
5. Display face up cards of players, but not CP.
6. Ask user if they want an additional card.
   1. Continue this process until that user busts or stops asking for cards.
   2. Continue through all players.
7. CP plays out their hand and compares to all remaining players.

**Concepts to Include**