

Jeopardy Game: An In-Depth Exploration and Implementation of a Classic Game

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Purpose

The purpose of this project is to combine an appreciation for the cultural icon that is Jeopardy! with a technical exploration of game design and implementation. By creating a digital Jeopardy! game, we aim to provide an interactive platform that not only replicates the show's entertainment value but also underscores its educational potential.

1. Introduction

The game of Jeopardy! is an iconic and beloved American television quiz show that has captivated audiences for decades. Created by Merv Griffin, the show first aired in 1964 and has since become a cultural phenomenon, with its distinctive format and memorable theme music becoming synonymous with intellectual competition. Jeopardy! has not only entertained generations but has also served as an educational tool, encouraging viewers to expand their knowledge and test their intelligence.

In the following sections, we will explore the rules and structure of the game, how it works for two or multiple players, the point system used to determine the winners and how our version differs.

2. Game Format

Jeopardy! consists of three main rounds: Jeopardy, Double Jeopardy, and Final Jeopardy.

2.1. Jeopardy Round:

Jeopardy! is traditionally organized into a single round, and this round is characterized by its unique question-and-answer format. The game is played on a rectangular grid consisting of six

categories, each with five questions or clues. This round allows contestants to display their knowledge, quick thinking, and strategy.

- **Categories:**

The Jeopardy Round begins with contestants facing a game board featuring six categories. These categories can span a wide range of topics, from history and geography to pop culture and science.

- **Clues and Questions:**

Each category contains five clues or questions, organized in ascending order of difficulty and point value.

Contestants take turns selecting a category and a point value. The host then presents the corresponding question. The distinctive aspect of Jeopardy! is that contestants must respond in the form of a question. For example, if the clue is "This U.S. President was the author of the Gettysburg Address," the correct response would be "Who is Abraham Lincoln?" or simply "Lincoln."

- **Point Values:**

The point values for questions typically range from 210\$ to 1,000\$ in the Jeopardy Round, with the higher values representing more challenging questions.

- **Daily Double:**

Within this round, there's one hidden "Daily Double" clue. When a contestant selects a question, they have the opportunity to wager any portion of their current point total on this single question, adding an element of excitement and strategy to the game.

- **Scoring:**

Contestants earn the point value associated with each correct response, while an incorrect response results in a deduction of the corresponding points.

- **Category Completion:**

Once all questions in a category have been answered, that category is considered complete, and contestants must select from the remaining categories.

The Jeopardy Round's single round format challenges contestants' knowledge, quick thinking, and ability to strategically accumulate points by selecting questions of varying point values. The goal is to end this round with the highest point total, as the contestant with the most points is typically declared the winner.

3. Three Players

Jeopardy! is traditionally played with 3 players. The players take turns selecting questions and responding. Each game is played through all three rounds with the winner being the player that has accumulated the most money as well as being able to come back and play again. Ties result in multiple contestants competing again.

4. Point System

In the Jeopardy round, point values typically range from 200\$ to 1,000\$ in increments of 200\$. In the Double Jeopardy round, point values range from 400\$ to 2,000\$ in increments of 400\$. In the Final Jeopardy round, contestants can wager any portion of their current score but cannot wager more than they have.

5. Winning

The contestant with the most points at the conclusion of the Final Jeopardy round is declared the winner. In the TV show, the winner returns as the reigning champion to compete in the next episode, potentially accumulating additional winnings.

Jeopardy! is celebrated for its blend of knowledge, strategy, and the iconic requirement to phrase responses in the form of a question. It continues to entertain and educate audiences, making it a classic and enduring quiz show.

6. Differences

Our version of Jeopardy! is a scaled down version made specifically for use over meeting applications such as Zoom and Microsoft's Teams. Therefore, the game play is condensed into one round per game eliminating Double and Final Jeopardy. The scoring system consists of dollar amounts from 10 - 1000 and the number of categories has been decreased from six to five. Other than these changes, the game is played in the same way with the same objectives.

7. Challenges

Game Design Complexity: Designing a digital Jeopardy! game that accurately replicates the show's format and rules can be quite challenging. The intricacies of the Jeopardy round, along with the need to randomize clues and categories, presented a significant challenge.

Question and Answer Database: One of the most substantial challenges was compiling a diverse and comprehensive database of questions and answers. This required extensive research and the categorization of questions to ensure that they matched the standards and variety of topics seen in the TV show.

User Experience: Ensuring that the game was user-friendly and intuitive for players was a challenge. The interface needed to be clear, easy to navigate, and responsive. This required a balance between maintaining the authenticity of the TV show and creating a digital game that players could easily understand and enjoy.

Scoring and Wagering: Implementing the scoring system required careful consideration and testing to prevent potential bugs or exploits.

8. Learned Lesson

Clear Roles and Responsibilities: Assigning specific roles and responsibilities to each team member is crucial. This ensures that everyone knows their duties and can work on their tasks independently. For example, one team member may be responsible for database management, another for user interface design, and so on.

Regular Meetings: Holding regular team meetings to discuss progress, share updates, and address challenges is essential. These meetings help team members stay on the same page, identify bottlenecks, and offer an opportunity for creative brainstorming.

Open and Honest Communication: Encourage open and honest communication within the group. Team members should feel comfortable expressing their ideas, concerns, and suggestions. Constructive feedback is essential for making improvements and avoiding misunderstandings.

Task Tracking and Project Management Tools: Utilize project management tools or software to track tasks, deadlines, and progress. This helps team members keep organized and ensures that everyone is aware of the project's status.