

Game Title: Dicey Showdown (A version of Ludo)

Enter the captivating realm of "Dicey Showdown," an exhilarating dice game meticulously crafted for four players. It provides a unique perspective on the well-known board game Ludo and offers an interesting experience. In this immersive gaming experience, you will embark on a journey of chance and strategy, where the anticipation of rolling a fateful higher number holds the key to triumph. Prepare to unveil your fate and embark on an enthralling journey with "Dicey Showdown."

Objectives:

In "Dicey Showdown," a competitive dice game tailored for four players, the primary objective is accumulating points by rolling the dice. Commencing with the personalization of player names, the players aim to roll a higher number, as it grants a score of 1, while any other outcome results in a score of 0. The player with the highest total score at the game's conclusion emerges as the victor. Whether you dominate through strategy or luck favours your hand, "Dicey Showdown" offers a spirited contest with a singular aim: to attain the title of ultimate champion.

Features:

Let us delve into the regulatory framework governing "Dicey Showdown," ensuring an equitable and captivating gaming experience:

1. **Player Names:** Embark on your "Dicey Showdown" journey by initiating the process through the "Edit Names" button. Inscribe the names of the four players, thereby personalising the game and infusing a competitive spirit into the proceedings.
2. **Roll the Dice:** Once the players' identities are established, commence the game by engaging the "Roll the Dice" button. Four dice will commence their roll in unison, with each die being intrinsically linked to a designated player.
3. **Scoring:** The quest for points hinges on the capriciousness of the dice. Players are rewarded with a single point exclusively if their respective dice manifest a higher number than the rest; conversely, all other outcomes result in a score of 0 for the given round.
4. **Winning Conditions:** The contest unfolds until a collective decision to conclude is reached. The distinction of victor is bestowed upon the player who accumulates the highest total score. In the event of a tie, where two or more participants share the pinnacle of scoring, the game concludes in a thrilling draw.
5. **Music Toggle:** Having the ability to turn on or off music will improve your game experience.
6. **Timed Game:** Players must strategically roll the dice to accumulate points as the clock runs out, but after three minutes, the game automatically resets the scores to zero.

Rules:

Each player can add his name using the Edit Name option and select ok or cancel accordingly. When the Roll Dice button is pressed the timer starts and the scores are shown in the scoreboard as well as it is indicated on the dice face. Apart from that we can add music from the button if it should be turned on or not.

Technology stack:

The technology stack comprises HTML for web page structure, CSS for design, and JavaScript for game logic, including dice rolling, score management, timers, and music

toggling. External resources like Google Fonts for typography and an audio file for in-game music enhance the immersive experience. The stack centres around "index.html" as the core structure, with image files ("dice1.png" to "dice6.png") representing dice faces, while "bg.png" contribute to the background aesthetics having the spooky theme. We have the background_music.mp3 file for the spooky themed music. This cohesive stack harmoniously blends to offer players an engaging and visually appealing game experience.

Setup and Deployment:

The "Dicey Showdown" setup and deployment process is simple and user-friendly. The availability of the entire source code within a separate repository makes this easier. One can easily clone or download the repository to get started, which includes all necessary files, including "index.html," background music file and the crucial picture files. This guarantees a simple and swift deployment of "Dicey Showdown" on the selected platform whether it is phone or desktop.

Credits for third-party assets and code:

In our project, we utilised images from Geeks for Geeks, significantly contributing to our visual content. Additionally, external guidance and resources facilitated the implementation of the random number generator for the dice in our project. Specifically, we received invaluable assistance from the following link:

<https://www.geeksforgeeks.org/building-a-dice-game-using-javascript/>

We took the idea from the following blog and created it for 4 player with a spooky theme.

<https://www.thapatechnical.com/2019/03/create-ludo-game-in-javascript-html-and.html>

Reflection on the Design and Development :

Creating "Dicey Showdown" has been an enlightening journey marked by successes and challenges. As the developers behind this project, we aimed to design a captivating and accessible dice game that blended luck and strategy. This reflection delves into the design and development process, highlighting the hurdles faced, accomplishments achieved, and the lessons learned along the way.

Design Goals and Vision:

At the outset of this project, our vision was clear - to craft a dice game that would capture the essence of excitement and unpredictability while offering an intuitive and engaging user experience. We wanted to keep the design simple yet visually appealing, allowing players to focus on the thrill of the dice rolls. This vision served as a guiding principle throughout the design and development phases. We initially wireframes our designs in lucidchart in order to know the aesthetic appealing version. As we continued, we added more features to it like setting up the timer, adding up the music button and so on.

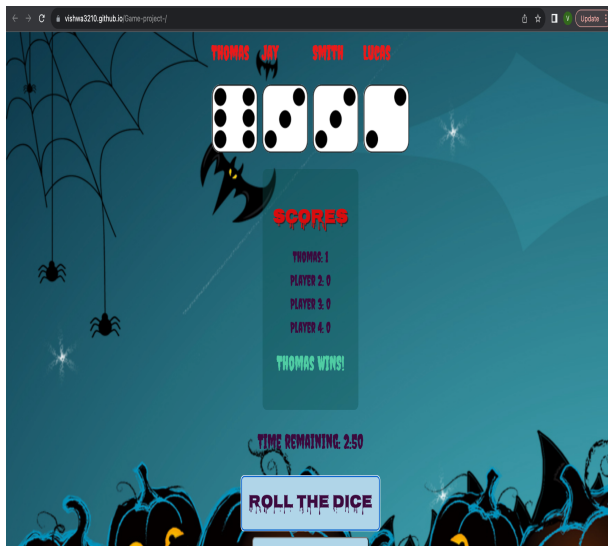


Figure 1: Desktop version

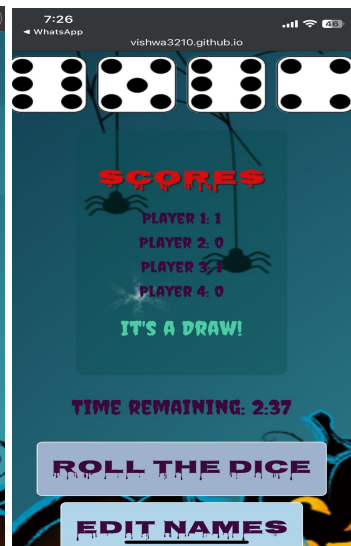


Figure 2: mobile version

Challenges Faced:

1. **User Interface Design:** Crafting a user-friendly interface that was both visually pleasing and responsive presented its set of challenges—balancing aesthetics with functionality required careful consideration. Iterative design and feedback loops helped us reach a satisfactory result.
2. **Score Counting:** Another significant challenge we encountered was accurately tracking and managing the scores. As the game progressed with multiple players, ensuring that each player's score was correctly recorded and displayed became demanding on the dice face.
3. **Random Number Generation:** Implementing a fair and genuinely random number generation system for the dice rolls was a significant technical challenge. Ensuring every player had an equal chance of rolling a more significant number without bias was critical to the game's integrity.

What Worked:

1. **Collaborative Development:** Effective teamwork was the cornerstone of this project. Collaboration, open communication, and regular code reviews allowed us to build a cohesive and reliable product.
2. **Iterative Design:** Our approach to design was iterative. We started with a minimalistic interface and gradually enhanced it based on user feedback and testing. This approach led to a clean and appealing design that prioritized user experience.
3. **User Testing:** Early and continuous user testing was invaluable. Gathering feedback from diverse users allowed us to make informed improvements and enhance gameplay.

What Did Not Work:

1. Initial Complexities: In the early stages of development, we overcomplicated specific game mechanics and features. Recognizing this, we had to streamline and simplify the gameplay to make it more accessible to a broader audience.
2. Initial Randomness Issues: Our first attempt at random number generation needed to be more unbiased than we intended. It took multiple iterations and expert consultation to ensure fairness in the dice rolls.

Lessons Learned:

1. Simplicity is Key: Simplicity in design and gameplay is often undervalued. Simplifying the game led to a more engaging and accessible product. We learned that elegance can reside in simplicity.
2. Continuous User Feedback: User feedback is invaluable. We realized that continuous interaction with potential players during development is essential. Their insights helped us refine the game, ensuring it met their expectations.
3. Collaboration is Strength: The strength of a collaborative team cannot be overstated. Open lines of communication, the willingness to learn from one another, and shared ownership of the project all contributed to our success.

In conclusion, the development of "Dicey Showdown" has been a journey filled with valuable experiences. Challenges were met with determination, and our collaborative efforts resulted in a game that we are proud of.

Contributors:

Vishwa Patel
Sandali Nemmaniwar
Benjamin Dunlap

Github Link to the project: <https://github.com/Vishwa3210/Game-project-/>

Online hosting of the game: <https://vishwa3210.github.io/Game-project-/>