A Report

On

Number guessing game

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Submitted by

Vikas Kumar-2001610100240
Sudhanshu Singh -2001610100217
Priyesh Dwivedi-2001610100159
Vishal Dhiman-2001610100244

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Sincerely

Vikas Kumar-2001610100240
Sudhanshu Singh -2001610100217
Priyesh Dwivedi-2001610100159
Vishal Dhiman-2001610100244

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ABSTRACT

Guessing Game

Guessing Game is a project that highlights the importance of one of the games that are of most prominence. The number guessing game can allow the users in guessing the numbers that display on the screen.

It can also help the children to use the umber guessing game as it can provide them the practice in guessing the numbers. The usage of the number guessing game is easily available through the use of this report.

The number guessing game is one such game that is increasingly gaining importance due to its prominence among children.1

INTRODUCTION

1.1 GENERAL

Games are popular means of fun and entertainment for people of all age groups. It provides an excellent source of rest and relaxation for adults, and a innovating and invigorating challenge to younger children .Random number guessing game is a new type of challenge to a younger audience and a nostalgic challenge to adults. The user has to input a number within the given range .The system determines if the user has entered a correct number or not If the number is higher or lower than the correct number then apporpriate message is displayed.

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1.2 OUTLINE OF THE PROJECT

I introduce the number guessing game, as well as the Bayesian scheme used to analyze the game. The goal is to come up with a way to find the optimal guess at each stage of the game. This paper introduces the risk function, and claims that the guess that minimized the expected risk is the best one to make. Two entities are playing a simple game. One player thinks of a number from 1 to n, and the other player tries to guess at the number repeatedly. The first player tells the second if the guess is too high or too low, until the second player guesses correctly. A cost is associated with each verdict of “Too High” or “Too Low”. Let us call them ↲ and respectively. The cost accumulates as the first player keeps guessing.The goal is to come up with the best guessing strategy that can minimize the cost

AIM AND SCOPE

2.1 AIM

Number Guessing Game or “Guess A Number” is a very simple and short JavaScript gaming mini project. This game is built for students who are looking for mini-games built in JavaScript.

2.2 PROBLEM STATEMENT

The user has to input a number within the given range. The system determines if the user has entered a correct number or not If the number is higher or lower than the correct number then apporpriate message is displayed

2.3 SCOPE

A number guessing game is a simple guessing game where a user is supposed to guess a number between 0 and N in a maximum of 10 attempts. The game will end after 10 attempts and if the player failed to guess the number, and then he loses the game.

SYSTEM ANALYSIS

3.1 GENERAL

3.1.1 USER INTERFACE

The user interface (UI) is the point of human-computer interaction and communicationin a device. This can include display screens, keyboards, a mouse and the appearance of a desktop. It is also the way through which a user interacts with an application or a website.

3.2 SOFTWARES USED

3.2.1 CODE EDITORS USED

Visual Studio Code

Visual Studio Code is a lightweight, open-source code editor by Microsoft. Featuring multi-language support, intelligent code completion, debugging tools, and a rich extension ecosystem, it offers a user-friendly interface and cross-platform compatibility. Its active community and constant updates contribute to its widespread popularity among developers for efficient coding.

3.2.2 PROGRAMMING LANGUAGES USED

HTML

HTML (Hypertext Markup Language) is the standard language for creating web pages. Using tags, it structures content like text, images, and links. HTML5, the

latest version, introduces new elements for multimedia and improved semantics. It forms the backbone of web development, providing the foundation for building interactive and dynamic websites.

CSS

CSS (Cascading Style Sheets) is a crucial web development language used to style and format HTML documents. Employing selectors, properties, and values, CSS enhances the visual presentation of websites. It enables design consistency, layout control, and responsiveness, allowing developers to create aesthetically pleasing and user-friendly interfaces. CSS3 introduces advanced features like animations and transitions, elevating the styling capabilities of modern web applications.

JavaScript

JavaScript is a versatile scripting language widely used in web development. Executed on the client-side, it enhances interactivity and dynamic content in browsers. JavaScript supports event-driven programming, enabling real-time user interactions. It's integral to building modern web applications, facilitating tasks like form validation, DOM manipulation, and asynchronous operations. The language has evolved with ECMAScript standards, and frameworks like Node.js extend its utility to server-side development, fostering a robust and comprehensive ecosystem.

3.3 PROJECT DESCRIPTION

The aim of this study was to find out whether it was effective or not to teach English vocabulary by using guessing game to the fifth grade students of Elementary school 117 Palembang. The population of this study was all the students of elementary school 117 Palembang in the academic year of 2016/2017 with the total number of students was 205. Meanwhile, the sample of the study was taken convenience sampling method. There were 40 students who were classified as the control group and 40 students who were classified as experimental

group. The method of the study was experimental method, and the type of experimental method is quasi experimental. In collecting the data, the researcher gave a test. In analyzing the data, the researcher used student's individual score, conversion score range, and t-test. Based on findings, the mean of students' pretestin experimental group was 72.125, while the mean of students' posttest in control group was 65.450. Furthermore, the result of independent sample t-test indicated

that valueof t-obtained was 5.046 at significant level p>0.005 for two-tailed test t-table is 1.9908. It is showed that t-obtained was higher than t-table, so it was concluded that Ho was rejected and Ha was accepted. It is clear that teaching English vocabulary by using guessing game was effective to the fifth grade students of Elementary school 117 Palembang. Key words: teaching, English vocabulary, guessing game

RESULTS AND DISCUSSION

4.1 SYSTEM REQUIREMENTS

- Operating System: Windows/Mac
- RAM: 4GB
- Processor: 64x 1.0Ghz processor
- ROM: 8GB

4.2 RESULT

The above system is an implementation of the key classes and features of java. It helps in providing a fun and exciting time pass for people of all age groups. The model can be improved by integrating this mor active UI elements and incorporating net connectivity

CONCLUSION AND FUTURE WORK

5.1 CONCLUSION

My Guessing Game is where you put a number in the input and press the button. If the number is too high it will go through the flow chart and then it will come up in the output box that your number is too high. If the number you put in was too low then it would go through the flow chart and in the output box it would tell you that your number was too low whereas if you got the number correct it would also go through the flowchart but would tell you in the output box it would say that until you got the number spot on. This will keep happening until you get the right number

5.2 FUTURE WORK

If you'd like to practice developing a similar number guessing game on your own, you can incorporate further details such as:

- limiting the number of attempts
- adding more than one round
- displaying win/loss score
- giving points to the user based on the number of attempts, etc.

5.3 REFERENCES

1. https://en.wikipedia.org
2. http://www2.lawrence.edu

APPENDIX

A. SOURCE CODE

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>Number Guessing Game</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            display: flex;
            text-align: center;
            justify-content: center;
            margin-top: 150px;
            background-image:
url(https://th.bing.com/th/id/OIP.pCvu9LYM7obYOyU
1k5ubTgHaE7?rs=1&pid=ImgDetMain);
```

```
            background-repeat: round;


        }


        #output {
            font-size: 18px;
            margin-top: 20px;
        }
    </style>
</head>
<body >
    <fieldset style="width: 33rem;
    height: 12rem;
    border-radius: 3rem;
    background-color: white;">


    <h1>Number Guessing Game</h1>
    <hr>
    <p>Try to guess the number between 1 and
100.</p>
    <p>Enter your guess: <input type="number"
```

```
id="userGuess" min="1" max="100" required>
        <button onclick="checkGuess()">Submit
Guess</button></p>
    <div id="output"></div>
    <script>
        // JavaScript code for the Number Guessing
Game

        // Generate a random number between 1 and
100
        const targetNumber = Math.floor(Math.random()
* 100) + 1;

        // Initialize variables
        let attempts = 0;

        function checkGuess() {
            // Get the user's guess from the input field
            const userGuess =
parseInt(document.getElementById('userGuess').val
ue);
```

```
        // Validate the input
        if (isNaN(userGuess) || userGuess < 1 ||
userGuess > 100) {
            alert('Please enter a valid number between
1 and 100.');
            return;
        }

        attempts++;
// Check the user's guess
if (userGuess === targetNumber) {
            displayMessage(Congratulations! You
guessed the number in ${attempts} attempts.);
            disableInput();
        } else {
            const hint = userGuess < targetNumber ?
'higher' : 'lower';
            displayMessage(Try a ${hint} number.
Remaining attempts: ${10 - attempts});
            if (attempts === 10) {
```

```
                displayMessage(Sorry, you've run out of
attempts. The correct number was
${targetNumber}.);
                disableInput();
            }
        }
    }

    function displayMessage(message) {
        const outputDiv =
document.getElementById('output');
        outputDiv.innerHTML = message;
    }

    function disableInput() {

document.getElementById('userGuess').disabled =
true;
        document.querySelector('button').disabled =
true;
    }
```

```
    </script>

    </fieldset>

</body>

</html>
```

Video Link of This Project:

https://www.loom.com/share/4bc764ee27b649ceb1e0817306f2883e?sid=b405d206-161c-4ed6-9b0f-748de2cdbdb5