Information and Communication Technology

2023-24

CERTIFICATE

This is to certify that the project **Hagman Game** has been carried out by Vivek Chavda (92200133026) under my guidance in partial fulfilment of the degree of Bachelor Engineering in Information and Communication Technology (4th Semester) of Marwadi University, Rajkot during the academic year 2023-24.

Internal Guide

Head of the Department

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Abstract :

Developing a Hangman game for a website involves setting up HTML elements for the game's components, styling them with CSS, and implementing core functionality using JavaScript. This includes word selection, displaying the secret word, managing user input, and checking win/loss conditions. Adding interactivity through event listeners and ensuring responsiveness across devices are crucial. After thorough testing and debugging, deploy the game online for others to enjoy.

Project Description:

Creating a Hangman game on a website involves several key steps. First, you'll need to establish the HTML structure, laying out the elements for displaying the hangman scaffold, the secret word, the guessed letters, and the input field for guesses. Next, apply CSS styling to enhance the visual appeal, customizing the appearance of various components. The core functionality comes from JavaScript, where you'll handle tasks like word selection, displaying the secret word initially as dashes, managing user input, updating the game state, and checking win/loss conditions. Interactivity is crucial, so implement event listeners for user input, ensuring the game responds seamlessly to clicks or key presses. Responsive design is also essential for accessibility across devices. Once the game is developed, rigorous testing and debugging are necessary to ensure smooth functionality. Finally, deploy your game on a web hosting platform, making it accessible to others. Remember, while this is a high-level overview, each step requires detailed planning and implementation, supported by ample online resources and tutorials. Enjoy the process of creating your Hangman game!

Features:

1. Random Word Selection: Choose a random word from a predefined list for players to guess.
2. Display Hidden Word: Show the word as a series of dashes representing each letter, gradually revealing correct guesses.
3. Input Field: Allow players to input their guesses through a text field or by clicking on letters displayed on the screen.
4. Guess Tracking: Keep track of letters guessed by the player, preventing duplicate guesses and providing feedback on incorrect guesses.
5. Hangman Scaffold: Display a visual representation of the hangman scaffold, updating it with each incorrect guess.

6. Win/Loss Conditions: Check if the player has successfully guessed the word or if they've made too many incorrect guesses, leading to a game over.
7. Score Tracking: Keep track of the player's score based on their performance, such as the number of correct guesses or remaining attempts.
8. Responsive Design: Ensure the game is playable and visually appealing across different devices and screen sizes.
9. Accessibility Features: Incorporate features such as keyboard navigation and screen reader compatibility to make the game accessible to all players.

Technology:

- **HTML:** This will be the foundation for creating the structure and content of the web pages. It will define elements like headers, paragraphs, forms, tables, etc.
- **CSS:** This will be used to style the web pages, controlling the layout, visual design, and responsiveness of the system across different devices.
- **JavaScript (JS):** JavaScript will add interactivity and dynamic behaviour to the web pages. It can be used for tasks like form validation, user interface enhancements (e.g., drop-down menus).

Future Enhancement:

Theme Packs: Introduce themed word packs based on categories like movies, sports, or science, allowing players to choose their preferred topics for guessing words.

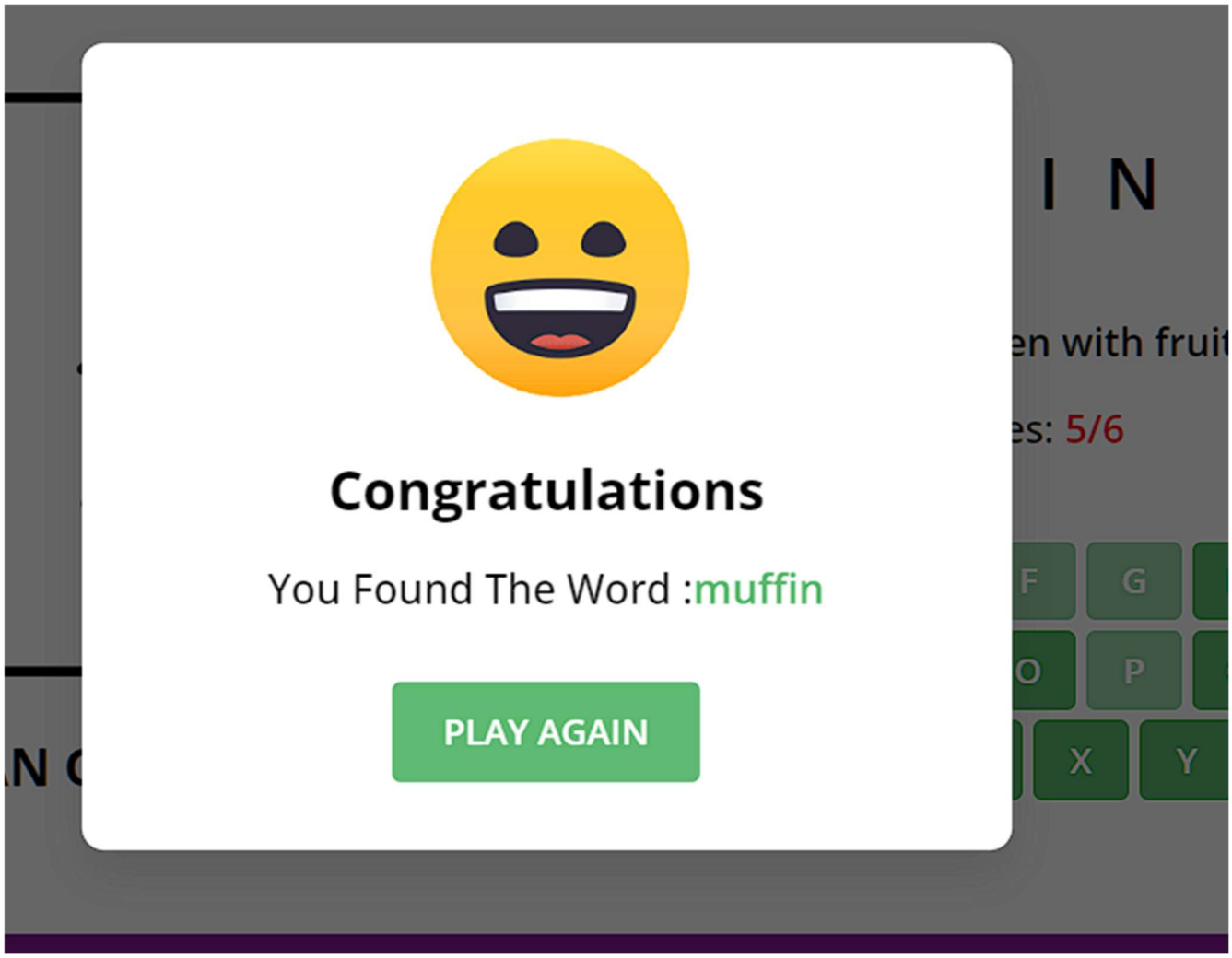
Dynamic Difficulty: Implement an adaptive difficulty system that adjusts based on the player's performance, providing a tailored challenge that keeps them engaged.

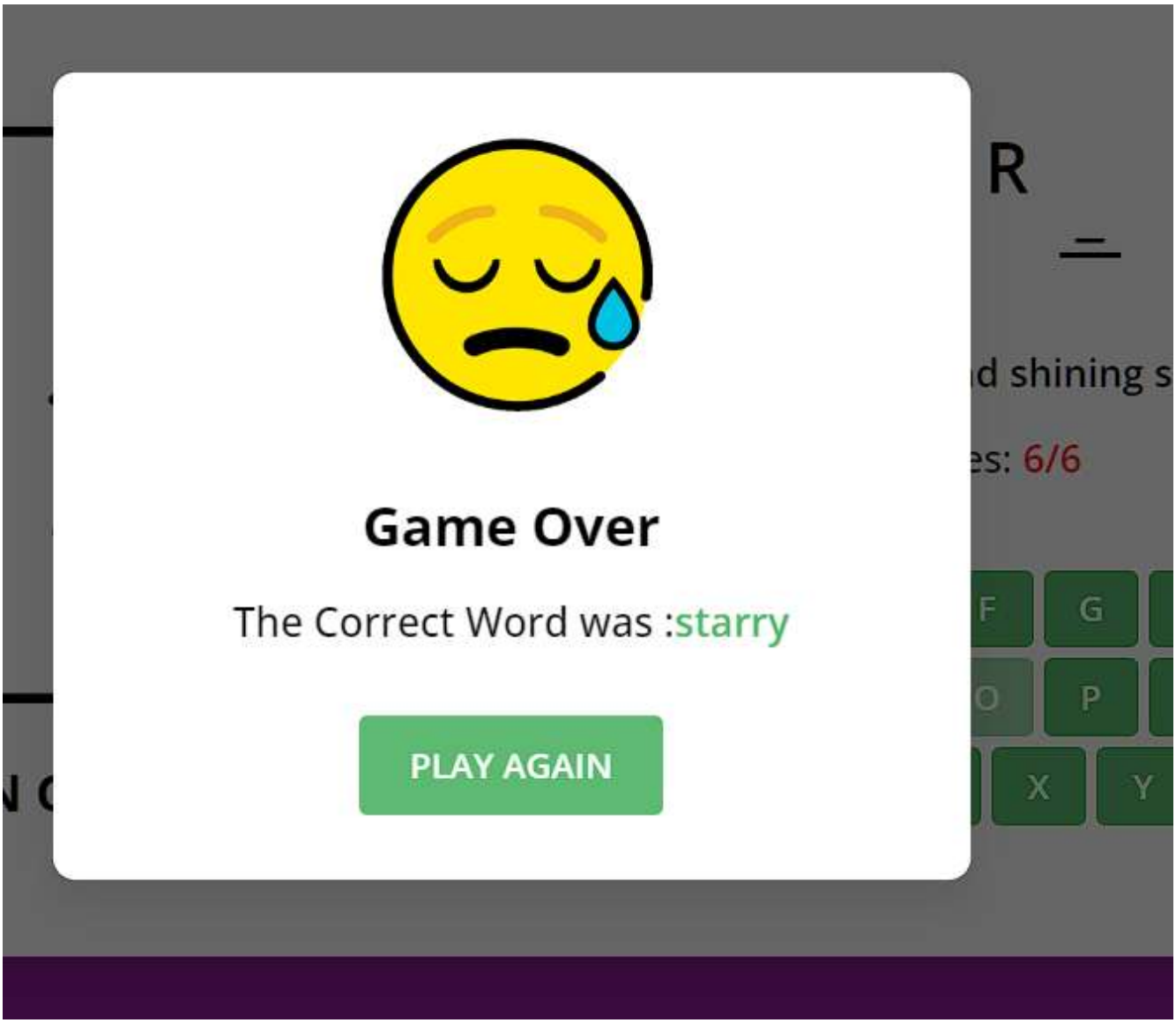
Interactive Hangman Scenes: Enhance the visual experience by incorporating animated hangman scenes that change dynamically as the game progresses, adding a storytelling element to the gameplay.

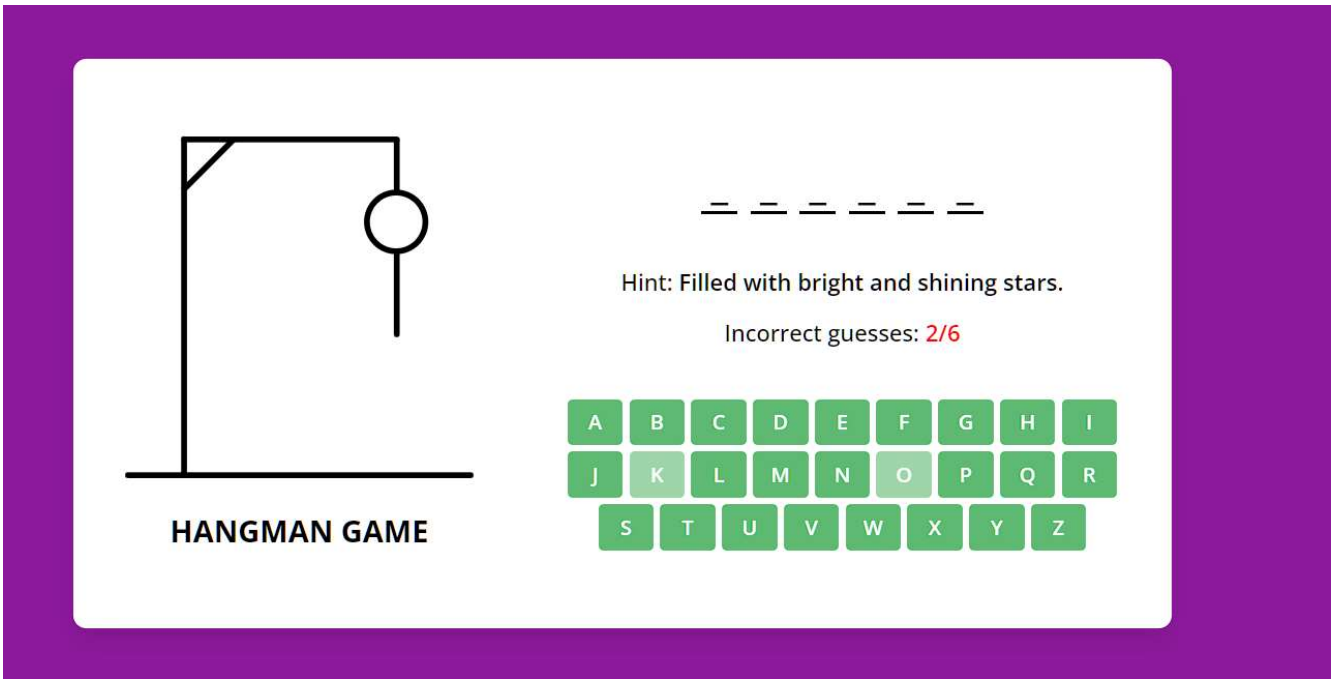
Multi-Language Support: Expand the game's reach by adding support for multiple languages, allowing players to enjoy the Hangman experience in their preferred language.

Achievements and Rewards: Introduce a system of achievements and rewards for completing challenges, unlocking special features, or reaching milestones within the gam
Block Diagram

Project Screenshots:




Game Over
The Correct Word was :starry
PLAY AGAIN


HANGMAN GAME
Hint: Filled with bright and shining stars.
Incorrect guesses: 2/6
A B C D E F G H I
J K L M N O P Q R
S T U V W X Y Z