

Module 1 – Frontend Web Development

JavaScript DOM Manipulation

Overview

Create an interactive one-page magical webpage that uses DOM manipulation techniques.

Instructions:

You are tasked with creating a “Magical Spell Generator” webpage where users can interact with elements to generate spells and see cool effects. Complete the six tasks below to bring the magic to life.

Set Up the Spellbook

- Create an empty HTML file with a title: "Magical Spell Generator".
- Add an **<h1>** with the text "Welcome to the Magical Spell Generator!"
- Create a **<div>** with the **id** of **spellArea** where generated spells will appear.

Add the Spell Ingredients

- Add a **<button>** with the text "Generate Spell" and an **id** of **generateButton**.
- Create an **** with the **id** of **ingredientsList** and add the following **** items:
 - “Dragon Scale”
 - “Phoenix Feather”
 - “Unicorn Horn”

Make the Button Work

- Write a JavaScript function that listens for a click on the “Generate Spell” button.
- When clicked, randomly select an ingredient from the **ingredientsList** and display it in the **spellArea**.

Add Some Colorful Magic

- Change the background color of the **spellArea** to a random color every time a new spell is generated.
- Use the **style** property to achieve this.

Countdown to Magic

- Before the spell appears in the **spellArea**, display a countdown from 3 to 1.
- Update the text in the **spellArea** each second, then display the spell.

Add a Reset Button

- Add another button labeled "Reset" with an **id** of **resetButton**.

- Clicking this button should clear the **spellArea** and reset it to its default state.

Submission:

After completing your code, upload your files to the LMS. Display the webpage in your browser and demonstrate your working solution to your lecturer for review.