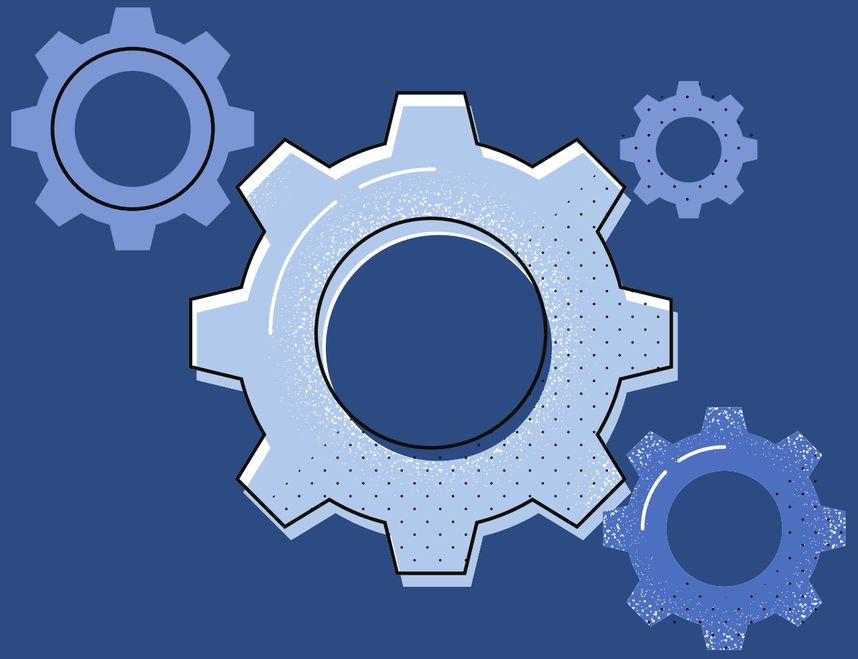
Interactive Dialog Boxes in JavaScript



Agenda

- Interactive Dialog Boxes
- Number Objects in JavaScript

DIALOG BOXES

Types of DIALOG BOX

JavaScript offers three types of dialog boxes:
(alert, prompt, and confirm boxes).
Each type serves a unique purpose in web development.

- Alert :

The alert box is used to display a message to the user. It can be used to provide information or to warn the user about an issue.
alert(‘hello world’)

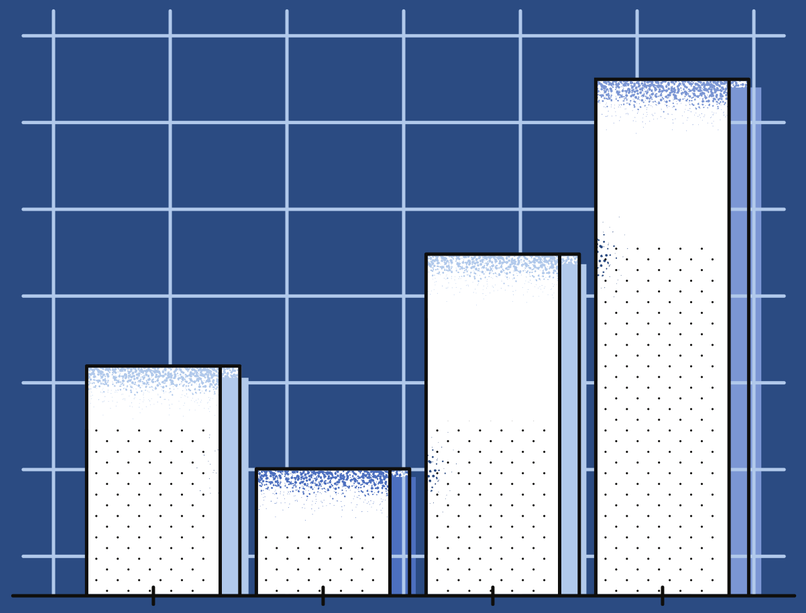
- Prompt :

The prompt box allows the user to input data and returns the value entered by the user. This type of box is useful for getting feedback from the user or for collecting data.

- Confirmation :

The confirm box displays a message to the user with two options: OK and Cancel. It is commonly used to confirm or cancel an action.

Number Object in JavaScript



The Number object in JavaScript is a built-in object that represents numeric values, allowing you to work with numbers in various ways. It provides a range of properties and methods that enable you to perform mathematical operations, format numbers, and validate numerical data.

Creation of Number Object:

You can create a Number object using the Number() constructor or by simply writing a numeric value

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```
const num1 = new Number(42); // Using constructor
const num2 = 123; // Without constructor (implicitly creates a Number object)
```

Common Properties:

- **Number.MAX_VALUE**: Represents the maximum numeric value that can be represented in JavaScript.
- **Number.MIN_VALUE:** Represents the smallest positive numeric value greater than 0.
- **Number. Nan:** Represents the "Not-a-Number" value, used to indicate an unrepresentable or undefined numeric result.
- **Number.POSITIVE_INFINITY:** Represents positive infinity, which is the result of mathematical operations that overflow.
- **Number.NEGATIVE_INFINITY:** Represents negative infinity, which is the result of mathematical operations that underflow.

Number methods:

- **toExponential()**:Forces a number to display in exponential notation, even if the number is in the range in which JavaScript normally uses standard notation.
- **toFixed() :** Formats a number with a specific number of digits to the right of the decimal.
- **toLocaleString() :**Returns a string value version of the current number in a format that may vary according to a browser's local settings.
- **toLocaleString() :** Defines how many total digits (including digits to the left and right of the decimal) to display of a number.
- **toString() :**Returns the string representation of the number's value.
- **valueOf()** :Returns the number's value.

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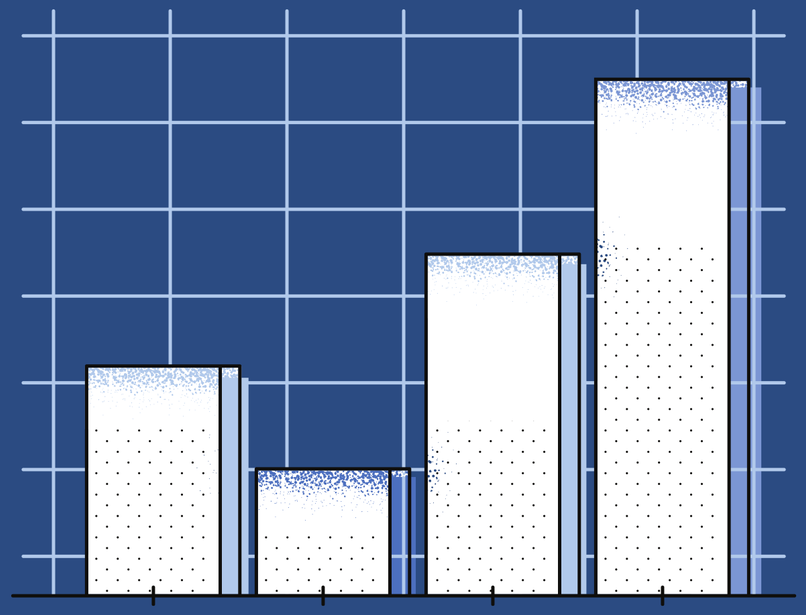
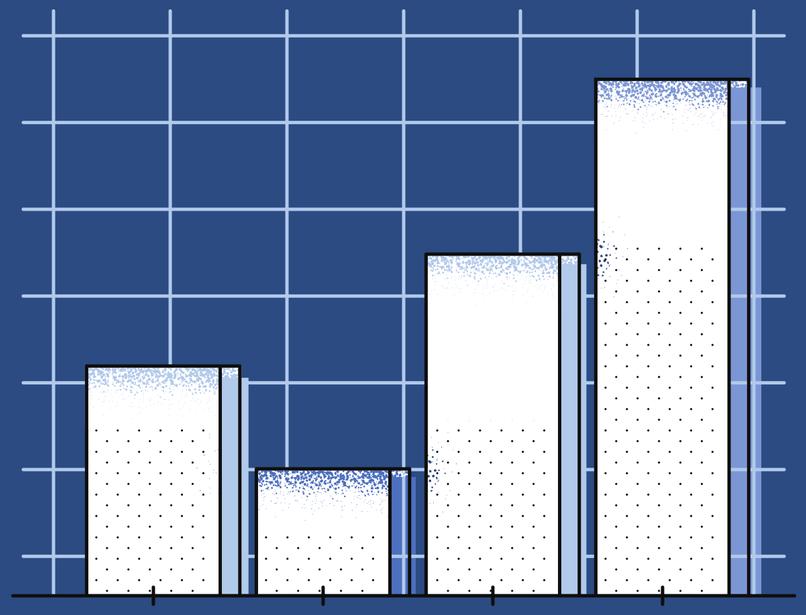
Boolean Object in JavaScript



In JavaScript, a Boolean object is an instance of the Boolean constructor. It is a wrapper around a primitive boolean value (true or false) that provides access to various methods and properties related to boolean values. However, using a Boolean object is not recommended in most cases, as working with primitive boolean values is more efficient and straightforward.

String Object in JavaScript



In JavaScript, a String object is an instance of the String constructor. It is a wrapper around a primitive string value that provides access to various methods and properties related to strings

- charAt(index): Returns the character at the specified index in the string.
- charCodeAt(index): Returns the Unicode value of the character at the specified index in the string.
- concat(str1, str2, ...): Concatenates two or more strings and returns a new string.
- indexOf(searchValue, fromIndex): Returns the index of the first occurrence of the specified substring or character in the string. If not found, it returns -1.
- lastIndexOf(searchValue, fromIndex): Returns the index of the last occurrence of the specified substring or character in the string. If not found, it returns -1.

- match(regexp): Searches for a match between a regular expression and the string and returns an array of matches.
- replace(searchValue, newValue): Searches for a substring or regular expression and replaces it with a new substring.
- search(regexp): Searches for a match between a regular expression and the string and returns the index of the first match.
- slice(startIndex, endIndex): Extracts a section of the string and returns a new string without modifying the original.
- split(separator, limit): Splits the string into an array of substrings based on the specified separator and optional limit.

Thank you