DAY 4

1. For the given JSON iterate over all the loops (for, for in, for of, forEach)

Let's assume the JSON structure looks like this:

const jsonData = {

"name": "John",

"age": 30,

"city": "New York",

"skills": ["JavaScript", "HTML", "CSS"]

};

1a. For Loop:

for (let key in jsonData) {

console.log(key, jsonData[key]);

}

1b. For...in Loop:

for (let key in jsonData) {

console.log(key, jsonData[key]);

}

1c. For...of Loop (for arrays):

for (let value of Object.values(jsonData)) {

console.log(value);

}

1d. forEach Loop (for arrays):

Object.values(jsonData).forEach(value => {

console.log(value);

});

1. Create your own resume data in JSON format

const resumeData = {

name: "ChatGPT Assistant",

title: "AI Language Model",

contact: {

email: "assistant@gpt.ai",

phone: "+1234567890",

address: "123 AI Street, Virtual City"

},

summary: "Versatile AI language model capable of assisting with a wide range of tasks and providing information on various topics.",

skills: [

"Natural Language Processing",

"Machine Learning",

"JavaScript",

"Python",

"Information Retrieval"

],

experience: [

{

position: "Assistant Developer",

company: "OpenAI",

location: "Virtual",

startDate: "2022-01-01",

responsibilities: [

"Providing assistance with natural language understanding",

"Generating human-like text based on input prompts",

"Continuous learning and adaptation to user needs"

]

},

{

position: "Language Model Intern",

company: "Tech Innovators",

location: "Cyber City",

startDate: "2021-06-01",

endDate: "2021-12-31",

responsibilities: [

"Training on large language datasets",

"Researching and implementing language generation techniques",

"Collaborating with research and development teams"

]

}

],

education: [

{

degree: "Master of Artificial Intelligence",

school: "AI University",

graduationYear: 2021

},

{

degree: "Bachelor of Computer Science",

school: "Tech Institute",

graduationYear: 2019

}

],

certifications: [

"AI Language Model Certification",

"Natural Language Processing Specialist"

]

};

console.log(JSON.stringify(resumeData, null, 2));

1. Read about the difference between window, screen and document in Javascript

In JavaScript, window, screen, and document are three distinct objects that provide different functionalities when working with web pages. Here's a brief overview of the differences:

window Object:

The window object represents the browser window or tab.

It is the global object in a browser environment, and it provides global scope for JavaScript code.

Variables declared without the var, let, or const keyword become properties of the window object.

It contains various properties and methods related to the browser window, such as window.innerWidth, window.innerHeight, and methods for opening and closing windows.

Example:

window.alert("Hello, world!"); // Displays an alert in the browser window

screen Object:

The screen object represents the user's screen or monitor.

It provides information about the user's screen, such as its width, height, and color depth.

Properties include screen.width, screen.height, and screen.colorDepth.

Example:

console.log("Screen width: " + screen.width);

console.log("Screen height: " + screen.height);

document Object:

The document object represents the HTML document in a web page.

It provides access to the content and structure of the document, allowing manipulation of the HTML elements and their properties.

Methods like getElementById, getElementsByClassName, and querySelector are used to select and manipulate elements in the document.

Example:

document.getElementById("myElement").innerHTML = "New content"; // Changes the content of an element with the specified ID

In summary:

window represents the browser window and provides global scope.

screen provides information about the user's screen.

document represents the HTML document and allows manipulation of its content.

These objects are crucial for interacting with and manipulating web pages using JavaScript.