JavaScript - Day -3: Arrays & Objects:

1. For a given JSON iterate over all data using loops:

Sample JSON;

{

"name": "John Doe",

"age": 30,

"email": "johndoe@example.com",

"address": {

"street": "123 Main St",

"city": "New York",

"state": "NY"

},

"hobbies": ["reading", "painting", "gaming"]

}

FOR LOOP:

const data = {

"name": "John Doe",

"age": 30,

"email": "johndoe@example.com",

"address": {

"street": "123 Main St",

"city": "New York",

"state": "NY"

},

"hobbies": ["reading", "painting", "gaming"]

};

for (let key in data) {

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

}

FOR – IN LOOP:

const data = {

"name": "John Doe",

"age": 30,

"email": "johndoe@example.com",

"address": {

"street": "123 Main St",

"city": "New York",

"state": "NY"

},

"hobbies": ["reading", "painting", "gaming"]

};

for (let key in data) {

if (data.hasOwnProperty(key)) {

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

}

}

FOR OF LOOP:

const data = {

"name": "John Doe",

"age": 30,

"email": "johndoe@example.com",

"address": {

"street": "123 Main St",

"city": "New York",

"state": "NY"

},

"hobbies": ["reading", "painting", "gaming"]

};

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

console.log(value);

}

FOR EACH :

const data = {

"name": "John Doe",

"age": 30,

"email": "johndoe@example.com",

"address": {

"street": "123 Main St",

"city": "New York",

"state": "NY"

},

"hobbies": ["reading", "painting", "gaming"]

};

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

console.log(value);

});

1. Create a resume data in JSON format;

{

"name": "Sulfiya",

"email": "sulfiya@example.com",

"phone": "123-456-7890",

"address": "123 Main St, kerala, KL",

"summary": "Experienced software engineer with a passion for developing innovative solutions.",

"education": [

{

"degree": "Bachelor of Technology in Computer Science",

"university": "XYZ University",

"year": 2016

},

{

"degree": "High School Diploma",

"school": "ABC High School",

"year": 2011

}

],

"experience": [

{

"title": "ITAnalyst",

"company": "XYZ Tech",

"location": "New York, NY",

"duration": "2015 - Present",

"responsibilities": [

"Developing and maintaining scalable web applications.",

"Collaborating with cross-functional teams to deliver high-quality software solutions.",

"Troubleshooting and resolving software defects and issues.",

"Participating in code reviews and providing constructive feedback."

]

},

"skills": [

"JavaScript",

"Python",

"HTML",

"CSS",

"React",

"Node.js",

"SQL",

"Git"

]

}

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

The Window, Screen, and Document objects are key components of the browser's Document Object Model (DOM) and provide different functionalities and properties.

**Window Object:**

The Window object represents the browser window or tab that contains the current web page. It acts as the global object for JavaScript in the browser context. The Window object provides methods and properties to manipulate the browser window, handle events, and interact with the user. Some commonly used properties and methods of the Window object include window.location for accessing the URL of the current page, window.alert() for displaying alert dialogs, and window.open() for opening new browser windows or tabs.

**Screen Object**:

The Screen object represents the user's screen or monitor. It provides information about the user's screen properties such as width, height, color depth, and available space. The Screen object is accessible through the window.screen property. You can use properties like screen.width and screen.height to retrieve the screen dimensions, screen.availWidth and screen.availHeight to get the available space for content, and screen.colorDepth to determine the number of bits used to represent colors on the screen.

**Document Object**:

The Document object represents the web page loaded in the browser window or tab. It provides methods and properties to access and manipulate the content, structure, and styles of the document. You can use the Document object to access and modify HTML elements, handle events, create new elements, and manipulate the DOM. Some commonly used methods and properties of the Document object include document.getElementById() for accessing an element by its ID, document.querySelector() for selecting elements using CSS selectors, and document.createElement() for dynamically creating new elements.

In summary, the Window object represents the browser window or tab, the Screen object represents the user's screen properties, and the Document object represents the web page loaded in the browser. Each object has its own set of properties and methods to perform different tasks within the browser environment.