Lecture-14: JSON, Local Storage, and Event Listeners in JavaScript

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Topics covered:

1. JSON (JavaScript Object Notation)
2. Usage of Local Storage
3. Transpotation (Text, HTML, XML, JSON)
4. Event Listeners

JSON Basics:

- JSON (JavaScript Object Notation) is a lightweight data interchange format.
- It's used for storing and exchanging data between a server and a client.
- JSON is easy for humans to read and write, and easy for machines to parse and generate.

JSON to String and Vice Versa:

- Converting JSON to a string: **`JSON.stringify()`**
- Converting a string to JSON: **`JSON.parse()`**

Event Listeners:

- Event listeners are used to listen for specific events and execute functions when those events occur.
- They are particularly useful for handling user interactions like clicks, hovers, etc.
- Event listeners allow us to attach multiple lines of code to be executed.

Local Storage:

- Local Storage is a web API that allows you to store key-value pairs in a web browser.
- It's useful for storing data that persists even after the user closes the browser.
- We can use Local Storage to save settings, user preferences, and other data

Working with Local Storage:

1. Create an element (e.g., a button) and assign it an ID.
2. Add an event listener to the element (e.g., `**add.addEventListener()**`).
3. Define a key (e.g., `**itemsJson**`) to store the data in Local Storage.
4. If the key's value is null, create an empty array and push title and description.
5. Use `**setItem**` to store the data using the key (e.g., `**itemsJson**`).
6. Convert the data to JSON format using `**JSON.stringify()**`.

Using forEach:

- The forEach method is commonly used to iterate over arrays and lists.
- It's useful for printing or mapping data in an array.

These concepts are fundamental for developing interactive web applications using JavaScript. Understanding JSON, Local Storage, and Event Listeners will enhance your ability to create dynamic and responsive web pages.