

Lecture-07: Array-2 and Functions in JavaScript

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BackEnd and Databases:

In web development, the BackEnd refers to the server-side of the application where data is stored and processed. It acts as a bridge between the FrontEnd (the user interface) and the database. Commonly used programming languages for BackEnd development include PHP, .NET, and Express.js.

Databases are an integral part of the BackEnd, where data is stored securely. Popular databases used in BackEnd development are MySQL, SQL Server, and others.

FrontEnd and Concatenation:

The FrontEnd refers to the user interface of a web application that users interact with. It includes elements such as buttons, forms, and other visual components. The BackEnd works behind the scenes, handling the business logic and processing data, while the FrontEnd presents the processed information to the users.

Concatenation:

The ".concat" method in JavaScript allows you to join two or more arrays together to create a new array. It does not modify the original arrays but creates a new one with the concatenated elements.

Example:

```
let name = ["ABC", "DEF", "GHI", "JKL"];
document.write(name + "<br>");

let names = ["Yousuf Bhai", "Sana Baji", "Khuzaima Bhai",
"Kinza Sheikh"];
let ourNewArray = names.concat(names);
document.write(ourNewArray + "<br>");
```

Output:

```
ABC,DEF,GHI,JKL  
Yousuf Bhai,Sana Baji,Khuzaima Bhai,Kinza Sheikh,Yousuf Bhai,Sana  
Baji,Khuzaima Bhai,Kinza Sheikh
```

Functions:

Functions in JavaScript are blocks of code that perform a specific task or action. They allow us to encapsulate a set of instructions and execute them whenever needed. Functions help follow the DRY (Don't Repeat Yourself) principle, promoting code reusability.

Function without Parameters:

```
khuzaima();  
  
function khuzaima() {  
    document.write("chuttiyan karne wala");  
}
```

Output:

```
chuttiyan karne wala
```

Function "khuzaima" is defined without any parameters and simply writes the message "chuttiyan karne wala" when called.

Function with Parameters:

```
add(100, 20);  
add(1000, 200);  
add(62, 420);  
add(19, 720);  
  
function add(a, b) {  
    var c = a + b;  
    document.write("adding " + c + "<br>");  
}
```

Output:

```
adding 120  
adding 1200  
adding 482  
adding 739
```

The function "add" takes two parameters, "a" and "b," and calculates their sum, which is then displayed using the "document.write" method.

Functions with parameters allow us to perform dynamic calculations or actions based on the input provided.