JavaScript Basics - Objects

Session 1: Understanding objects (key-value pairs)

Session 2: Adding, updating, and deleting properties

Learning Objectives:

- Understand what JavaScript objects are and how they store data

- Learn how to create objects using key-value pairs

- Learn how to access, add, update, and delete properties

Session 1: Understanding Objects (Key-Value Pairs)

What is an Object?

An object is a collection of key-value pairs.

Each key is also called a property name, and the value can be any data type.

Example:

```
let person = {
  name: "Sara",
  age: 25,
  isStudent: true
};
```

Accessing Values:

```
console.log(person.name);      // Output: Sara
console.log(person["age"]);    // Output: 25
```

Session 2: Adding, Updating, and Deleting Properties

Adding Properties:

```
person.city = "Prishtina";

person["language"] = "Albanian";
```

Updating Properties:

```
person.age = 26;

person["name"] = "Sara Xhuli";
```

Deleting Properties:

```
delete person.isStudent;
```

Example: Full Flow

```
let book = {

  title: "JS for Beginners",

  author: "John Doe"

};


book.year = 2023;              // Add

book.author = "Jane Smith";        // Update

delete book.title;              // Delete


console.log(book);

// Output: { author: "Jane Smith", year: 2023 }
```

In-Class Task (Practice)

1. Create an object named car with properties: brand, model, year

2. Add a new property: color

3. Update the model to something else

4. Delete the year property

5. Print the final object using console.log

Summary:

- Objects store data in key-value format

- Use dot or bracket notation to access values

- Add/update by assigning: object.key = value

- Use delete to remove a property