

Training Day 11

Day 11– 5th July 2025

JavaScript Conditional Statements and Loops

Detailed Description:

On Day 11, we explored how **JavaScript can make decisions and perform repetitive tasks** using conditional statements and loops. The instructor emphasized that these concepts are essential for **interactive and intelligent web behavior**.

◆ 1. Conditional Statements

Conditional statements allow JavaScript to **execute certain code only if specific conditions are met**.

Types of conditional statements learned:

1. if Statement

```
let age = 18;

if (age >= 18) {

    alert("You are eligible to vote.");

}
```

2. if-else Statement

```
let age = 16;
```

```
if (age >= 18) {  
  
    alert("You can vote.");  
  
} else {  
  
    alert("You are not eligible to vote.");  
  
}
```

3. if-else if-else Statement

```
let marks = 75;  
  
if (marks >= 90) {  
  
    alert("Grade A");  
  
} else if (marks >= 75) {  
  
    alert("Grade B");  
  
} else {  
  
    alert("Grade C");  
  
}
```

4. Switch Statement

```
let day = 3;  
  
switch(day) {  
  
    case 1: alert("Monday"); break;  
  
    case 2: alert("Tuesday"); break;
```

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```
case 3: alert("Wednesday"); break;

default: alert("Other day");

}
```

Through practice, I understood how **decision-making** works in JavaScript to display different outputs based on user input or conditions.

◆ 2. Loops in JavaScript

Loops allow us to **repeat tasks automatically**, reducing code repetition. We practiced the following types of loops:

1. for Loop

```
for(let i = 1; i <= 5; i++) {

  console.log("Hello, World! " + i);

}
```

2. while Loop

```
let i = 1;

while(i <= 5) {

  console.log("Learning JS Loops " + i);

  i++;

}
```

3. do-while Loop

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```
let i = 1;

do {

  console.log("Do-While Loop " + i);

  i++;

} while(i <= 5);
```

The instructor emphasized that loops are useful for **tasks like generating lists, animations, and dynamic content** on webpages.

◆ 3. Practical Exercises

We combined **conditional statements and loops** in small projects:

- Displaying **odd/even numbers** from 1 to 20.
- Creating a **simple quiz** that shows messages based on user answers.
- Generating dynamic HTML lists using loops and `document.write()`.

Example practiced:

```
for(let i = 1; i <= 10; i++) {

  if(i % 2 == 0) {

    console.log(i + " is even");

  } else {

    console.log(i + " is odd");
```

}

}

These exercises helped me see how **logic and repetition** are combined to create interactive and responsive behavior on web pages.

Learning Outcomes:

- Understood the use of **conditional statements** for decision-making.
- Learned to apply **if, if-else, if-else if, and switch statements** in practical scenarios.
- Learned the types of loops (for, while, do-while) and their usage.
- Practiced combining conditions and loops for dynamic content generation.
- Developed a foundation for **more advanced JavaScript programming** in web development.