

CONTROL STRUCTURES IN JAVASCRIPT

What are control structures?

Control structures are used to help us change the flow of code in. They can also be defined as statements that control the flow of a program.

There are three types of control structures:

- Conditionals (if-else, switch) that perform different actions depending on the value of an expression,
- Loops (while, do-while, for, for-in, for-of), that execute other statements repetitively,
- Jumps (break, continue, labeled statement) that cause a jump to another part of the program.

LOOPS

A loop is a way to repeat code in your program. Loops can execute a block of code a number of times. There are different types of loops namely:

- `for` - loops through a block of code a number of times
- `for/in` - loops through the properties of an object
- `for/of` - loops through the values of an iterable object
- `while` - loops through a block of code while a specified condition is true
- `do/while` - also loops through a block of code while a specified condition is true

CONDITIONALS

Conditional statements are used to perform different actions based on different conditions.

In JavaScript we have the following conditional statements:

- Use `if` to specify a block of code to be executed, if a specified condition is true
- Use `else` to specify a block of code to be executed, if the same condition is false
- Use `else if` to specify a new condition to test, if the first condition is false

- Use `switch` to specify many alternative blocks of code to be executed

The if Statement:

Use the `if` statement to specify a block of JavaScript code to be executed if a condition is true.e.g.

```
if (hour < 18) {  
  
    greeting = "Good day";  
  
}
```

The else Statement

Use the `else` statement to specify a block of code to be executed if the condition is false.e.g.

```
if (hour < 18) {  
  
    greeting = "Good day";  
  
} else {  
  
    greeting = "Good evening";  
  
}
```

The else if Statement

Use the `else if` statement to specify a new condition if the first condition is false.e.g.

```
if (time < 10) {  
  
    greeting = "Good morning";  
  
} else if (time < 20) {  
  
    greeting = "Good day";  
  
}
```

```
} else {  
  
    greeting = "Good evening";  
  
}
```

JUMPS

Jumps are control structures that cause a jump to another part of the program. It is divided into:

- Break statements
- Labeled statements
- Continue statements