

JS Conditionals

Typical Program Execution

JavaScript is an **asynchronous** programming language

- It reads line by line from the top
- Starts the execution of each line in order
- **But doesn't wait for each line to complete!**

What are conditionals?

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- Conditional statements execute or skip parts of a program
 - Based on the value of an expression
- These are the decision points of your code, or the "branches"
- They rely quite heavily on boolean(ish) values

Why do we use them?

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- To make decisions with code
- To allow "state" to change how our program runs
 - Makes our programs more flexible!
- To make part of our code optional

The `if` statement

The `if` statement

- The fundamental control statement in JavaScript. It adds logic to our programs
- It requires:
 - The `if` keyword
 - Parentheses with a condition in the middle
 - Curly brackets to show what code should execute
- [This is roughly how it runs](#)

The `if` statement

```
if ( CONDITION ) {  
  
    // CODE TO EXECUTE IF THE  
    // CONDITION EVALUATES TO TRUE  
  
}
```

The if statement

```
if ( 2 === 2 ) {  
    console.log("That makes sense");  
}  
  
var favBook = "GEB";  
if ( favBook === "GEB" ) {  
    console.log("Good choice!");  
}  
  
var playerOneMove = "Rock";  
if ( playerOneMove === "Scissors" ) {  
    console.log("P1 played scissors");  
}
```

The if/else statement

```
if ( CONDITION_GOES_HERE ) {  
  
    // CODE TO EXECUTE IF THE  
    // CONDITION EVALUATES TO TRUE  
  
} else {  
  
    // CODE TO EXECUTE IF THE  
    // CONDITION EVALUATES TO FALSE  
  
}
```

The if/else statement

```
if ( 2 === 2 ) {  
    console.log("That makes sense");  
} else {  
    console.log("Uh oh");  
}  
  
var myNumber = 42;  
if ( myNumber > 0 ) {  
    console.log("The number is positive");  
} else {  
    console.log("The number is negative");  
}
```

The if/else if/else statement

```
if ( FIRST CONDITION ) {  
    // CODE TO EXECUTE IF FIRST  
    // CONDITION EVALUATES TO TRUE  
} else if ( SECOND CONDITION ) {  
    // CODE TO EXECUTE IF SECOND  
    // CONDITION EVALUATES TO TRUE  
} else {  
    // CODE TO EXECUTE IF NEITHER  
    // CONDITION EVALUATES TO TRUE  
}
```

The if/else if/else statement

```
var vehicle = "Car";

if ( vehicle === "Car" ) {
    console.log("You are driving a car");
} else if ( vehicle === "Motorcycle" ) {
    console.log("You are riding a motorbike");
} else {
    console.log("We aren't sure what you are driving");
}
```

The `if/else if/else` statement

- You can have as many `else if`s as you need
- JavaScript will run the code in **only the first passing condition's** curly brackets
 - It will skip the rest

Resources

- [MDN](#)
- [JavaScript.info](#)
- [Speaking JavaScript](#)
- [Eloquent JavaScript](#)
- [SitePoint](#)