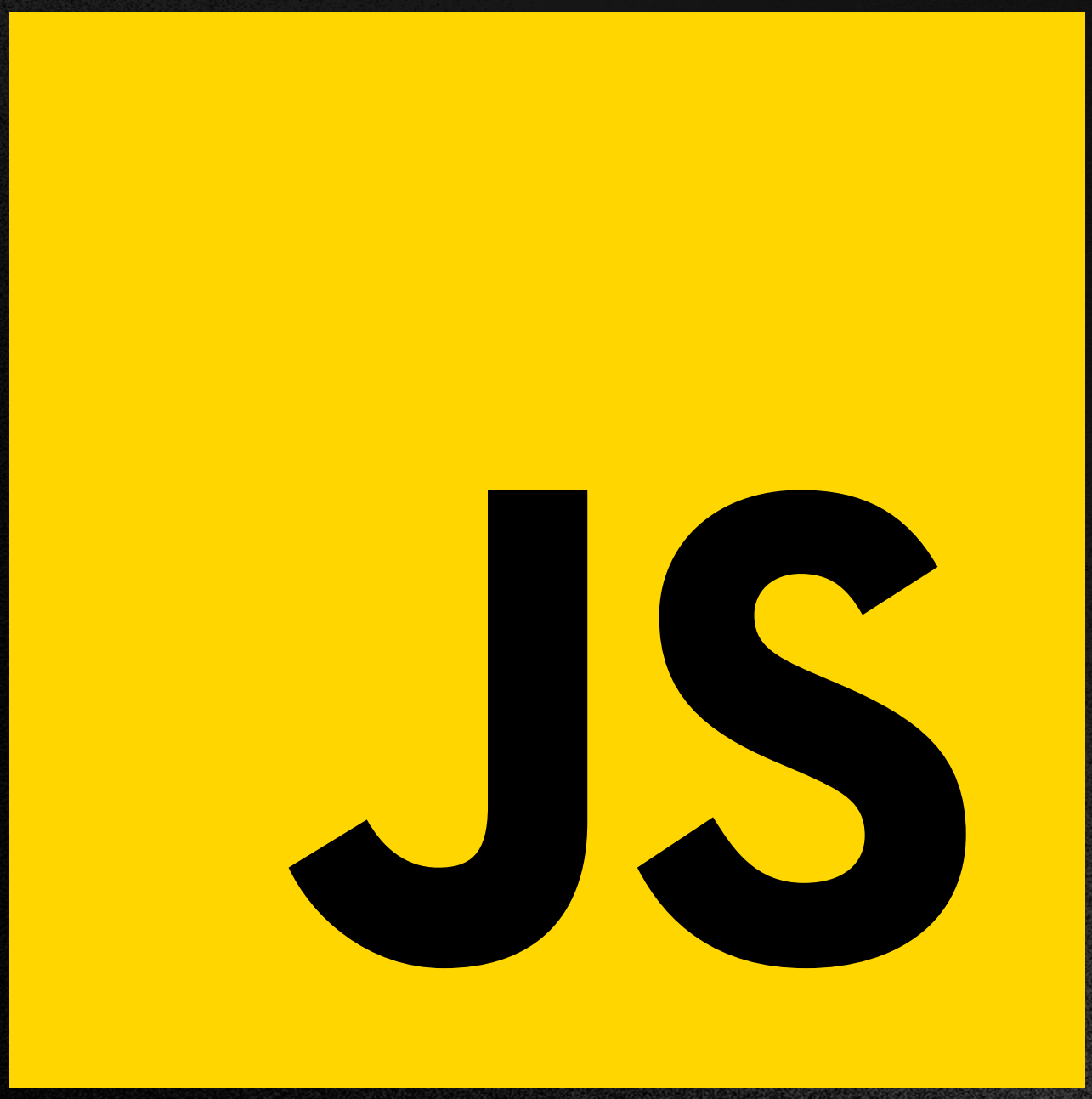
# Java Script

## Different Types of Loops




[ Don’t Miss It ]

# The Classical For Loop

- The workhorse of loops, perfect for precise control over iteration.

JS

```
for (let i = 0; i < 5; i++) {
  console.log(i);
}
// Outputs: 0, 1, 2, 3, 4
```

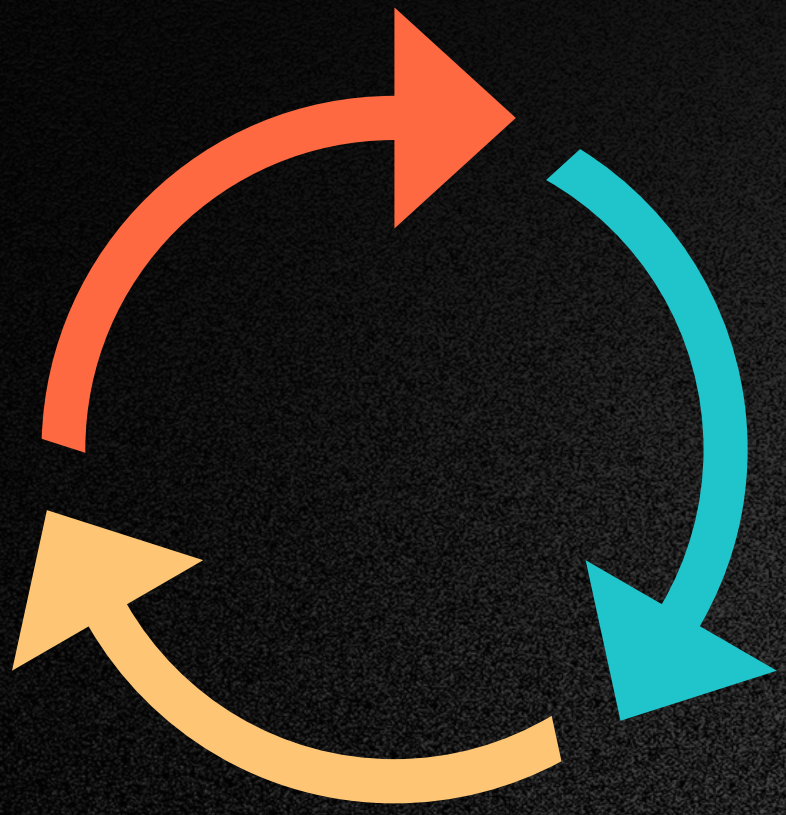
# for...of Loop

- Ideal for iterating over iterable objects like arrays or strings.

JS

```
const techStack = ["JavaScript", "React", "Node.js"];

for (const tech of techStack) {
  console.log(tech);
}
// Outputs: JavaScript, React, Node.js
```



# forEach() Array Method

- A concise and expressive way to iterate through arrays.

JS

```
const numbers = [1, 2, 3, 4, 5];

numbers.forEach(number ⟹ {
  console.log(number);
});
// Outputs: 1, 2, 3, 4, 5
```

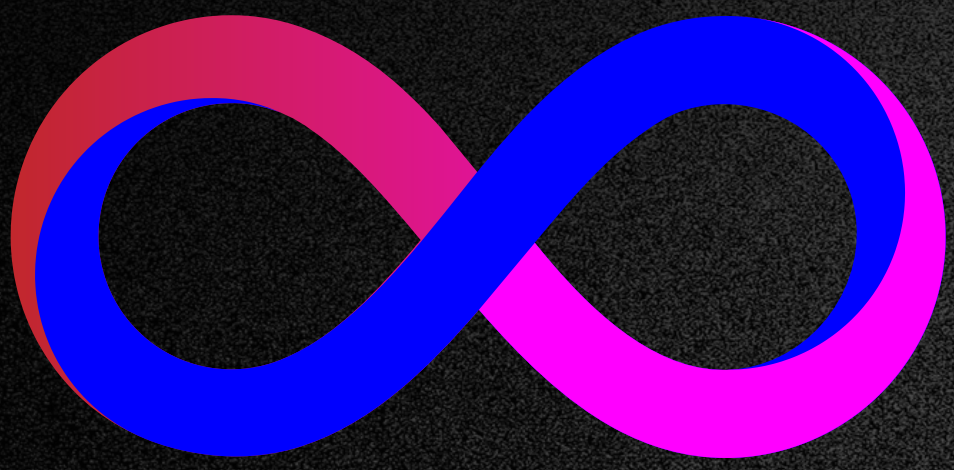
# for...in Loop

- Perfect for iterating over the properties of an object.

JS

```
const user = { name: "TechExplorer",
               role: "Developer",
               language: "JavaScript" };

for (const key in user) {
  console.log(`${key}: ${user[key]}`);
}
// Outputs: name: TechExplorer,
//          role: Developer,
//          language: JavaScript
```



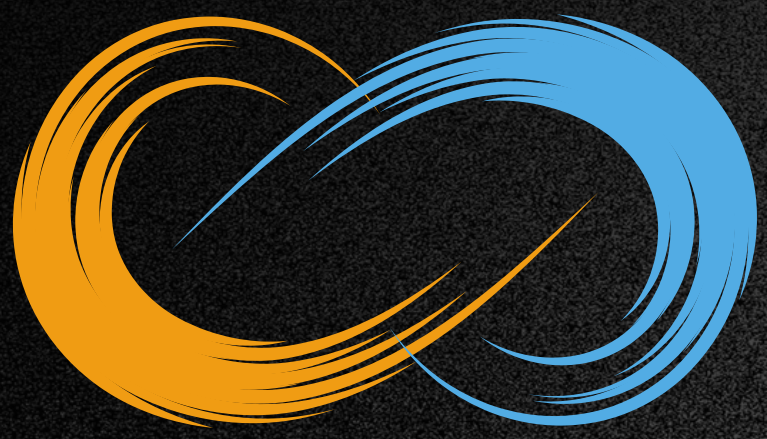
# while Loop

- Use when the number of iterations is unknown or based on a condition.

JS

```
let counter = 0;

while (counter < 3) {
  console.log(counter);
  counter++;
}
// Outputs: 0, 1, 2
```



# do...while Loop

- Ensures at least one execution before checking the condition.

JS

```
let count = 0;

do {
  console.log(count);
  count++;
} while (count < 3);
// Outputs: 0, 1, 2
```

# Array Methods (map, filter, reduce)

- Elevate your array operations with these functional programming gems.

JS

```
const numbers = [1, 2, 3, 4, 5];

const doubledNumbers = numbers.map(number ⇒ number * 2);
console.log(doubledNumbers);
// Outputs: [2, 4, 6, 8, 10]
```

# DID YOU FIND IT HELPFUL ?

Share this with a friend who needs it!

**VINCENT RAJA**

FULL STACK WEB DEVELOPER