









In JavaScript, there are several built-in error types that help developers identify and handle different types of issues that might arise during code execution.

Here's a detailed overview of these error types:

#### **SyntaxError**

Occurs when there is a mistake in the syntax of the code, preventing it from being parsed correctly.

```
// Missing closing parenthesis
console.log('Hello, World!';
```

#### ReferenceError

Happens when a non-existent variable is accessed.

```
// Accessing an undeclared variable
console.log(nonExistentVariable);
```

## **TypeError**

Arises when an operation is performed on a value of the wrong type.

```
let num = 42;
// Attempting to call a method that doesn't exist on the number
num.toUpperCase();
```

### RangeError

# Occurs when a value is not within the expected rang

```
// Creating an array with an invalid length
let arr = new Array(-1);
```

#### **URIError**

Happens when there is an issue with encoding or decoding URIs.

```
// Malformed URI sequence
decodeURIComponent('%');
```

## Handling Errors with try...catch

To handle these errors gracefully, JavaScript provides the try...catch statement, which allows you to catch and respond to errors without stopping the execution of your program.





