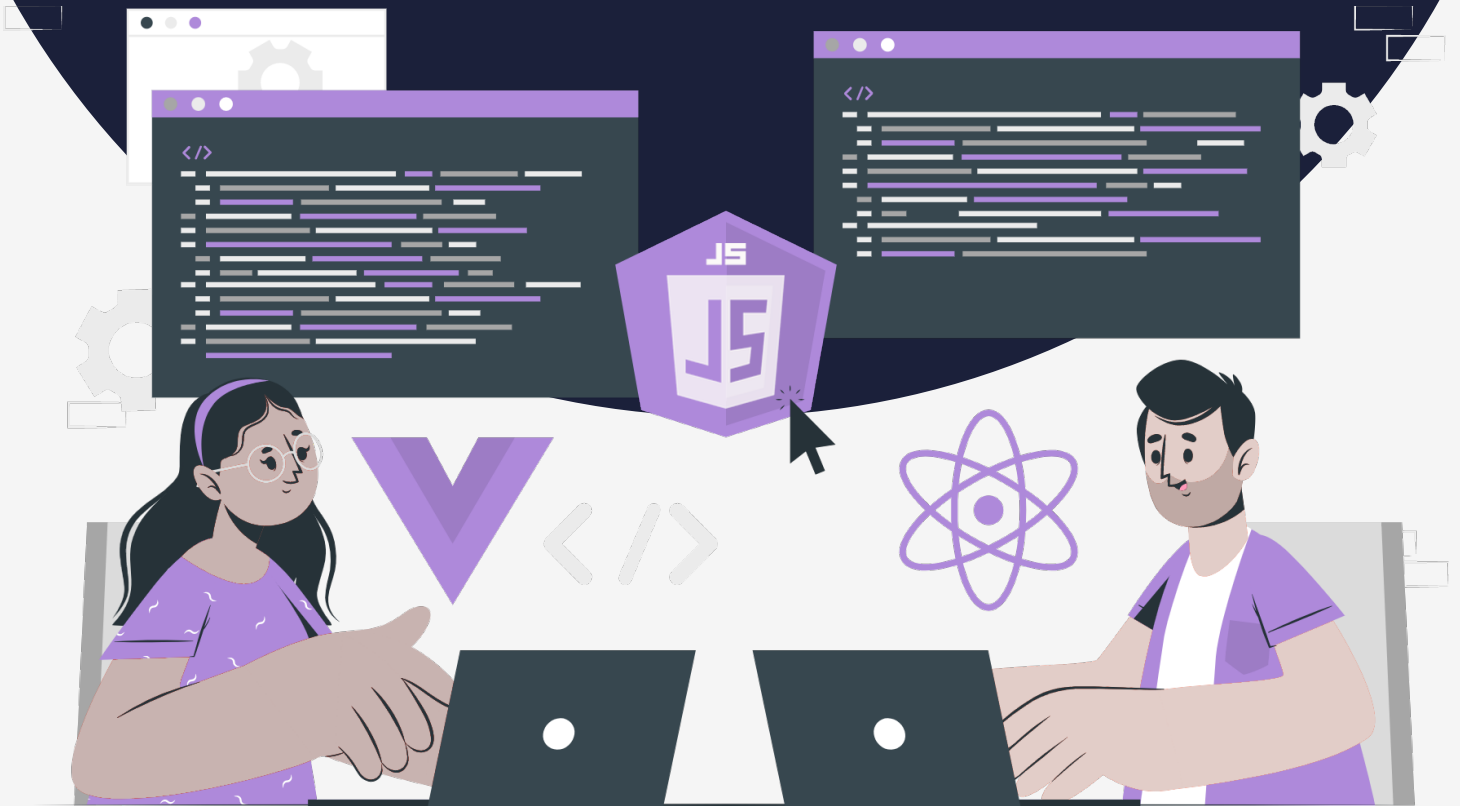# Lesson:

Try and Catch

Topics Covered:

1. Introduction to exceptional handling in Javascript.
2. Introduction to try-catch.
3. Syntax & Flowchart of try-catch.
4. try-catch-finally.

In this lecture let's look into the exceptional handling in javascript. Exception handling is a technique in programming to handle errors and exceptions that occur during the execution of a program. In JavaScript, the try-and-catch statements are used to handle exceptions. We will be looking at exceptional handling in depth in this lecture.

Before understanding, exception handling it is important to understand the types of errors.

There are two main types of errors in JavaScript:

1. Syntax Errors: occur when the code syntax is not proper and the JavaScript interpreter can't understand it. This error can't be handled with exception handling.

2. Runtime Errors: occur while the code is executing, such as when trying to access an undefined variable or when a function is not found. These errors can be handled using exception handling.

Only run-time errors which occur during the execution can be handled using exception handling in JavaScript.

Let's first understand how exception handling is done in javascript. We know that in JavaScript, the try-and-catch statements are used to handle exceptions. We should always keep the complex code in a try-catch statement. The try statement and catch statement in javascript come in pairs.

Now let us discuss the try-catch in the javascript statements.
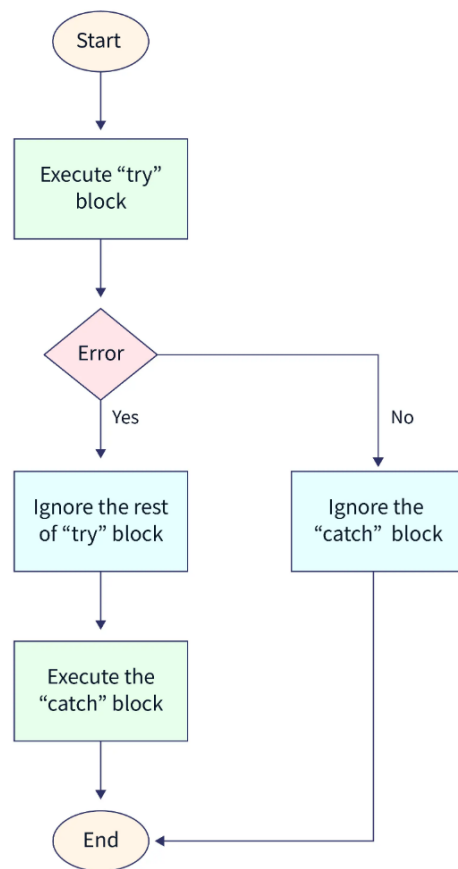
Try statement

It is a piece of code that needs to be tested during the execution of code. The block of code is checked if it has any errors or not. If any errors are encountered, then the try{} statement passes it to the catch{} statement block. Once the control is handed over to the catch block the code block under catch{} will be executed.

Catch Statement

The catch statement defines a block of code that gets executed when any errors are encountered within the try block. The catch block gets executed only when there is any error present in the try block and the error needs to be addressed. Otherwise, the catch block gets skipped. The catch block gets executed only after the execution of the try block.

The syntax of try-catch is as follows:

You can refer to the below flowchart for a better understanding of how exception handling works.

In addition to the catch statement, we can also use the finally statement, which defines a block of code that will be executed regardless of whether an exception was thrown or not. This can be used to perform other actions after the try-and-catch statements have been executed.

The syntax of try-catch-finally blocks is:

```
// Syntax of try-catch-finally
try
{
    // block of code for testing.

}catch{
    // block of code for addressing errors.

}finally {
    // block of code to run after try-catch
}
```

We will be looking at how exception handling can be implemented in Javascript in the next lecture.