Exception Handling using try catch

For **error handling** or **exception handling** in javascript, we can use **try catch**.

It is compulsory to handle runtime errors in javascript. Errors can block the whole code.

JavaScript Exception Handling using Try Catch

By using **error handling**, our program will execute even if any error occurs.

Forms of try statement

1. try ... catch
2. try ... finally
3. try ... catch...finally

try

try is a code block used to wrap exceptions. The code will run normally, but if any error occurs, try will **throw** error using string or error Object.

Try with Condition

```
try{
    if(error){ throw "error";}
}
catch(err){
```

```
    console.log(err);
  }
```

Try without Condition

```
try{
var x=navigator.getBattery().then((x)=>{console.log(x.level*100+"%")});
console.log(x);
}
catch(err){
console.log(err);
}
```

throw

throw block is used to throw exceptions. **throw** can send a string error message, or **error object**.

```
    var x=3;
    try{
        if( x<0){  throw "negative no";}
        if( x==0){  throw "zero";}
    }
    catch(error)
```

Catch

catch statement is used to catch the error thrown by try block.

```
var x=3;
    try{
        if( x==0){  throw "zero ";}
        if( x<0){  throw "negative no";}
    }
    catch(error)
```

Error Object

We can also **error object** to handle runtime errors.

Error Object Example

```
var x=3;
    try{
        if( x==0){  throw  new Error("zero");}
        if( x<0){  throw new Error("Negative Number");}
    }
    catch(error){
        console.log(error);
    }
```

1. It is compulsory to use catch or finally after try block.

finally

finally block is used after catch block. **finally** block will always execute whether an error occurs or not. Lets says we want some output even if errors occurs, we can use finally block.

```
var x=3;
    try{
        if( x==0){  throw  new Error("zero");}
        if( x<0){  throw new Error("Negative Number");}
    }

    catch(error){
        console.log(error)
    }

    finally{
        console.log("the number is ", x);
    }
```