# **RULESETS FOR WRITING A PROGRAM**

**Rule1:** Assume your Code will fail

What if source is null?

What if destination is null?

**Rule 2:** Log errors to the server.

**Rule 3:** We(developers) should handle the errors not the browsers

### **3.1 Try-catch**

* + Thrown errors contain extra information.
  + Errors that are caught are considered to be handled

### **3.2 Window.onerror**

* Last stop before browser responds
* Return true to indicate not to respond
* Only supported in Internet Explorer and Firefox.

**Rule 4:** Identify where errors might occur.

### **4.1 Types of Errors**

1. Type coercion errors
2. Data type errors

* Often occurs with function arguments
* Typically, a symptom of insufficient value checking

1. Communication Errors

* Invalid URL
* Server response status
* no network connection
* server response content.

**Rule 5:** Throw your own errors

* Errors should be thrown in low level parts of application
* Use try-catch blocks in higher level parts.

**Rule 6:** Distinguish between fatal and non-fatal

* Don’t allow your code to determine if it is a fatal or non-fatal
* The user Experience comes first.

**Rule 7:** Provide a debug mode

* Assign a variable that is globally available
* Try-catch should re-throw the error
* Window.onerror should return false
* Allow the browser to handle the error.