

## **Week 5 Research Assignment:**

*What is the relationship between a Class and an Object?*

A class is the blueprint that defines object properties and behavior. An object is a member or an instance of a class. An object has a state in which all properties have values that are either explicitly defined or are defined by default settings. Objects are needed to access the data members and member functions of the class.

*What is an exception and what are the best practices for handling them?*

An exception is the code that breaks the normal flow of the code. These require specialized programming constructs for execution.

Best practices include:

1. Don't overuse. This could lead to adverse effects both for application performance and error detection.
2. Avoid browser-specific non-standard methods. Some browser-specific syntax will fail when used on other browsers.
3. Exception handling in Javascript Asynchronous Code. It is not possible to use "try-catch" with asynchronous functions because they always return a rejecting promise when calling the test function. Since the "try-catch" block doesn't wait for the function execution, the "catch" block will not execute even if the function causes an error.

## **Sources:**

[https://www.ncl.ucar.edu/Document/HLUs/User\\_Guide/classes/classoview.shtml#:~:text=A%20class%20defines%20object%20properties,are%20defined%20by%20default%20settings.](https://www.ncl.ucar.edu/Document/HLUs/User_Guide/classes/classoview.shtml#:~:text=A%20class%20defines%20object%20properties,are%20defined%20by%20default%20settings.)

<https://www.geeksforgeeks.org/difference-between-class-and-object/>

<https://blog.bitsrc.io/javascript-exception-handling-patterns-best-practices-f7d6fcab735d>

<https://www.javatpoint.com/exception-handling-in-javascript#:~:text=An%20exception%20signifies%20the%20presence,programming%20constructs%20for%20its%20execution.>