

2. What is the relationship between a Class and an Object?

JavaScript classes are used to create objects and define their properties and functionality.

JavaScript objects are instances of classes. They are similar to JavaScript variables; however, while a variable usually stores one value, objects usually store many different values.

A useful analogy for explaining the relationship between JavaScript classes and objects is to refer to classes as blueprints and objects as the products built from those blueprints. Many products (objects) can be created from one blueprint (class).

Resources: <https://www.w3schools.com/js/> and weekly class notes.

3. What is an exception and what are best practices for handling them?

An exception is an unexpected program or application error. Exceptions need to be “handled” by containing responses to them in your code. The goal of these responses is to allow a program or application to continue working when it encounters an exception. and give the user information about what caused it. This is preferable to just letting the program or application crash and causing the user to bang their head on a table.

Exceptions can be handled in JavaScript with “try catch” blocks of code containing statements that tell a program or application how to respond to them.

- The **try** statement includes alternate code a program or application can try so it can continue executing
- The **catch** statement includes code telling the program or application how to resolve the exception
- The **finally** statement includes code telling the program or application to keep executing even if the exception can’t be resolved
- The **throw** statement includes code that defines a custom response to the exception

Exception handling is typically used for errors a developer can’t fix such as those caused by invalid user input, third party code libraries, network failures, or APIs. Exception handling should not be used for code that is poorly written and produces multiple errors.

Resources: https://www.w3schools.com/js/js_errors.asp and weekly curriculum and class notes.