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| **What is inheritance?** | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  | **Entry** | |

Inheritance enables new objects to take on the properties of existing objects. A child inherits visible properties and methods from its parent while adding additional properties and methods of its own. If the is a relationship does not exist between a subclass and superclass, you should not use inheritance. A class can be derived from more than one class or interface, which means that it can inherit data and functions from multiple base classes or interfaces.

**Object**

An object is an entity that encapsulates data and behaviour, where behaviour is the set of functions or “methods” that operate on the data.

**What is object-oriented programming (OOP)?**

Object-oriented programming (or OOP) is a paradigm or pattern of programming whereby the solution to a programming problem is modelled as a collection of collaborating objects. Objects collaborate by sending messages to each other. It is most suitable for managing large, complex problems.

**What is encapsulation?**

Encapsulation prevents access to implementation details. It describes the idea of bundling data and methods that work on that data within one unit, e.g., a class. We can access information of objects through getter setter methods.

**What is polymorphism?**

Polymorphism is a concept by which we can perform a single action in different ways. You have objects of different types that define a common interface so that the different objects respond in their own way to the same message.

**Can we invoke overridden method in parent class?**

An overridden method is essentially hidden in the parent class, and is not invoked unless the child class uses the super keyword within the overriding method.

**Why do we need constructor?**

Constructor is used to initialize an object (instance) of a class. The constructor IS the "Initialize function"

Rather than calling two functions

object = new Class;

object.initialize();

You just call

object = new Class();