

Polymorphism Quiz

1. Polymorphism means many forms.
2. When applied to OO design we mean code that can be re-used. Eg methods and properties within a parent class that are used in a child class or can be overridden to be modified.
3. We use 'extends' in the child class and make the parent class abstract.
4. Parent or child
5. For instance if a parent class of vehicles has a method hornNoise() this could return different noises for a car ("Beep") and bike ("Ding")
6. Composition is used when a class 'has-a' relationship with one or more objects of other classes.
7. You would use composition when you have a class composed of other classes - eg Hotel composed of Rooms in hotel lab, or a School composed of Teachers and Students.
8. In aggregation we can modify the parent without affecting the child, in composition there is a strong association and the child will also be modified.
9. To reuse code for extra functionality.
10. When using composition when an object is destroyed the objects that it is composed of cannot exist independently.
11. When using aggregation if the parent is destroyed the objects that it is composed of can still exist.