**GUIDE TO APIE**

**Encapsulation**

why ? Easier access to functions and functionality. Easy to call, easier to maintain

Group functionality and data together

Easier to test

**Abstraction**

Moves from a specific idea to a more general one

the process of taking away or removing characteristics from something in order to reduce it to a set of essential characteristics.

In the process of abstraction, the programmer tries to ensure that the entity is named in a manner that will make sense and that it will have all the relevant aspects included and none of the extraneous ones

**Polymorphism**

Can be either a subclass or a superclass.

When instantiating the subclass, you declare as the superclass type

Subclass extends superclass

Any class can be a superclass

All fields and methods can be inherited unless marked private

It’s common to set fields as private and methods as protected or public

**Inheritance**

One functionality extended to many

(Object)

Parent/Child

Superclass/Subclass