

4.0 Objects Revisited

Class: Defines a complex data type with attributes and methods that operate on those attributes.
Can be thought of as a blueprint for an object.
Every java file is a class.

Object: An instance of a class.
It will be given a variable name.
It will be instantiated using the *new* keyword.

Example:

```
SomeClass obj = new SomeClass();
```

This would be executed by code that is a client of SomeClass.

4.1 Anatomy of a class

A class has these *members* in them:

1. Instance Variables (or attributes) (or properties)
2. A Constructor (one or more, they initialize the instance variables)
3. Methods (they operate on the instance variables)

Access modifiers – public/private

Each member of a class can be private or public.

private members: clients cannot access private members.
They can only be accessed from within the class.

public members: clients can access public members