

Serie 1

1 Theory

- a) It allows for
 - a. Easier development of complex software.
 - b. Easier reuse of existing programs (libraries)
 - c. Easier software maintenance
 - d. Easier adaptation or extension of software
- b) It's a compilation unit that determines the attributes of objects that it instantiate.
- c) An object is an instance of a class. It is determined by its attributes that reflect its state and behavior.
- d) An attribute visibility defines whether this attribute can be accessed from outside the class or not.
- e) Yes. They can be accessed through public methods.
- f) No.
- g) No.
- h) To create an object, we use: `new ClassName(arg1, arg2, ...)`
- i) An object is automatically destroyed by the garbage collector in Java.
- j) The garbage collector periodically clears the memory of any inaccessible objects and reorganize it.

3 Debugging

- a) `Error:(5, 19) java: Car(java.lang.String) has private access in series.series_1.examples.Car`
The class constructor is set to private, we cannot use it outside the class itself.
`Error:(6, 31) java: model has private access in series.series_1.examples.Car`
Same as above, the field 'model' is set to private, so it cannot be accessed from outside the class
- b) 1. We can set the 'Car' constructor to public so it can be accessed from outside the class.
2. We can create a new public method called 'getModel()' that returns the model of the car.