

التاريخ: 10/12/24

الموضوع:

## 2 - Dart programming - Classes

→ **key word** ← **class name**  
class plants { → **class start**

**Data members** {  
// Fields = properties  
// setters and getters  
// Constructors  
// methods = jobs

} ← **class end**

→ to make an object **new** keyword is our **hero for instantiation**.

Example: make an object

```
plants p1 = new plants();
```

→ Constructors can be with no arguments and can be parametrized.

Also, there are default constructors and named ones.

Any constructor's job is to allocate the object in the memory.

→ this keyword is a prefix of any variable to refer to the current object.

→ to access any field or method of our object dot notation is used:

```
object_name.field_name;  
object_name.method_name;  
();
```



→ Getters and setters allow retrieving and initializing fields' values.

Getter	setter
- has return value	- has no return value
- has no parameters	- has one parameter

→ Dart supports single and multilevel inheritance, but does not support multiple inheritance.

But 😊

multiple inheritance can be achieved by mixins.

→ class inheritance and method overriding.

to change the superclass methods' implementation with whatever the sub class wants >> we override them using `@override` keyword which is optional to be written but it's good practice to be written.

→ It's important that, while overriding a method we should apply the same return value, same parameters List.



- static Fields / methods
  - should be mentioned with the class name.
- static method only uses static fields.
- super keyword
  - to reach the parent class version of fields and methods we use **super** keyword.