

❖ Abstract Class & Method:

- An abstract class is a class that is declared abstract it may or may not include abstract methods.
- Abstract classes cannot be instantiated, but they can be subclassed.
- Abstract class can have normal methods and abstract methods.
- Abstract class cannot instantiate that mean it cannot be build objects from this abstract class.
- Abstract class usually work as a base or super class.
- Abstract method does not have body it just has name without body then in the subclass it must have body and the programmer to an override and inside the body the programmer decides what the method will do or what its job.
- Abstract class can continue constructor and instance variable

❖ Important points of the Abstract Class:

- If you want to define something as abstract, just write the word abstract before it.
- A class defined as abstract is called Abstract Class.
- An ordinary class not defined as an abstract is called a Concrete Class.

- The function defined as abstract is called Abstract Method or Abstract Function.
- A regular class cannot contain functions of type abstract.
- The Abstract Class can contain regular functions, and it can contain functions of their type of abstract.
- If you define a class as abstract, then this class cannot create objects from it.
- Since objects cannot be created from the Abstract Class, this means that to take advantage of this class, it must be inherited.
- A class that inherits from its type of abstract class, must do Override for all functions defined as abstract.

❖ Important points of the Abstract Method:

- If you put the word abstract before the name of the function, it means that it is a function of type abstract. A function of type abstract is a function that has a specific name and type, but does not contain a body, it does not have start and end brackets {}.
- The regular function contains the start and end parentheses {}.
- The Abstract Method must include a semicolon; At the end, replace the starting and ending parentheses.

- The class that inherits from the class of its type of abstract, it must do Override for each function of its type of abstract, that is, the body of these functions must be written.

❖implements

- this key word is used to implement an interface by forcing the redefinition of the functions.
- To be more clear implements can be used if you want to create your own implementation of another class or interface.
- When class H implements class A all functions defined in class A must be implemented.
- When you're implementing another class, you do not inherit code from the class you only inherit the type.
- In Dart you can use the implements keyword with multiple classes or interfaces