

# PARAMETERIZED CONSTRUCTOR IN DART

## Parameterized Constructor

Parameterized constructor is used to initialize the instance variables of the class.

Parameterized constructor is the constructor that takes parameters. It is used to pass the values to the constructor at the time of object creation.

## Syntax

```
class ClassName {  
    // Instance Variables  
    int? number;  
    String? name;  
    // Parameterized Constructor  
    ClassName(this.number, this.name);  
}
```

## Example 1: Parameterized Constructor In Dart

In this example below, there is a class **Student** with three properties: **name**, **age**, and **rollNumber**. The class has one constructor. The constructor is used to initialize the values of the three properties. We also have an object of the class **Student** called **student**.

```
class Student {  
    String? name;  
    int? age;  
    int? rollNumber;  
    // Constructor  
    Student(this.name, this.age, this.rollNumber);  
  
void main(){  
    // Here student is object of class Student.  
    Student student = Student("John", 20, 1);  
}
```

```
    print("Name: ${student.name}");
    print("Age: ${student.age}");
    print("Roll Number: ${student.rollNumber}");
}
```

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## Example 2: Parameterized Constructor With Named Parameters In Dart

In this example below, there is a class **Student** with three properties: **name**, **age**, and **rollNumber**. The class has one constructor. The constructor is used to initialize the values of the three properties. We also have an object of the class **Student** called **student**.

```
class Student {
  String? name;
  int? age;
  int? rollNumber;

  // Constructor
  Student({String? name, int? age, int? rollNumber}) {
    this.name = name;
    this.age = age;
    this.rollNumber = rollNumber;
  }
}

void main(){
  // Here student is object of class Student.
  Student student = Student(name: "John", age: 20, rollNumber: 1);
  print("Name: ${student.name}");
  print("Age: ${student.age}");
  print("Roll Number: ${student.rollNumber}");
}
```

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# Example 3: Parameterized Constructor With Default Values In Dart

In this example below, there is class **Student** with two properties: **name**, and **age**. The class has parameterized constructor with default values. The constructor is used to initialize the values of the two properties. We also have an object of the class **Student** called **student**.

```
class Student {  
    String? name;  
    int? age;  
  
    // Constructor  
    Student({String? name = "John", int? age = 0}) {  
        this.name = name;  
        this.age = age;  
    }  
}  
  
void main(){  
    // Here student is object of class Student.  
    Student student = Student();  
    print("Name: ${student.name}");  
    print("Age: ${student.age}");  
}
```

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 Info

**Note:** In parameterized constructor, at the time of object creation, you must pass the parameters through the constructor which initialize the variables value, avoiding the null values.

## Video

Watch our video on parameterized constructor in Dart.