

Dart Basics Cheat Sheet

1■■ Variables & Data Types

```
var name = "Roshan"; String city = "Delhi"; int age = 25; double height = 5.9; bool isActive = true; final currentTime = DateTime.now(); // runtime constant const pi = 3.14159; // compile-time constant
```

2■■ Functions

```
void greetUser(String name) { print("Hello, $name!"); } int add(int a, int b) => a + b;
```

3■■ Null Safety

```
String? nickname; nickname = null; print(nickname ?? "No nickname"); // fallback if null
```

4■■ Control Flow

```
if (age > 18) print("Adult"); for (int i = 0; i < 5; i++) print(i); while (age < 30) age++;
```

5■■ Collections

```
List fruits = ["apple", "banana"]; Map user = {"name": "Roshan", "age": 25}; Set uniqueNumbers = {1, 2, 3, 3};
```

6■■ Classes & Objects

```
class Person { String name; int age; Person(this.name, this.age); void greet() => print("Hello, I am $name"); }
```

7■■ Constructors & Named Parameters

```
class User { final String name; final int age; User({required this.name, required this.age}); }
```

8■■ Inheritance

```
class Animal { void speak() => print("Animal speaks"); } class Dog extends Animal { @override void speak() => print("Dog barks"); }
```

9■■ Async / Await

```
Future fetchData() async { await Future.delayed(Duration(seconds: 2)); print("Data fetched!"); }
```

■ Spread & Null-aware Operators

```
List numbers = [1, 2, 3]; List newNumbers = [...numbers, 4, 5]; Map data = {"name": "Roshan", ...{"city": "Delhi"}};
```