Generic Classes

A generic class is that which takes in one or more so-called generic types, usually annotated with single letters such as T, G, E, etc, and allows the consumer of the public interface of the API to call methods and getters and setters inside the class as if the class was written for the specific data type the consumer is expecting. Generic classes help remove boiler-plate and repeated code.

Further reading:

- Generics dart.dev
- · Working with generic types in Dart medium
- · Generics in Dart explanation with example CodeVsColor
- · Dart Generics GeeksforGeeks
- · Generics Dart Metanit



Examples

```
// generic classes define their own generic types using
   // notations such as T or E. It's completely up to you
2
   // how you alias your generic types
3
   class NumberStorage<T extends num> {
     final List<T> _list = [];
5
     // then we have a function that can store a generic
6
     // value of the same T type as the class defines
     void store(T value) => _list.add(value);
     // and we expose a getter called "sum" that can
9
     // collect the sum of all values inside our _list
10
     T get sum => _list.reduce((lhs, rhs) => lhs + rhs as T);
11
12
```