



Hive

Lokalna podatkovna baza
- Flutter

Hive



- Hive je lahka in izjemno hitra **NoSql** podatkovna baza tipa **ključ-vrednost**, napisana v čistem **Dartu**.
- Močno šifrirana z uporabo **AES-256**.
- Hive ne podpira le osnovne tipe in sezname, ampak tudi **kateri koli Dart objekt**.
- Potrebno je ustvariti **adapter** za tip pred shranjevanjem objektov !

<https://docs.hivedb.dev/#/>

Primer uporabe podatkovne baze Hive

1. Dodajanje odvisnosti
2. Definiranje objekta (Hive)
3. Inicializacija baze
4. Pridobivanje iz baze



1. Dodajanje odvisnosti

- V datoteko *pubspec.yaml* dodamo ustrezne odvisnosti

```
dependencies:  
  hive: ^2.2.3 # check for the latest version  
  hive_flutter: ^1.1.0 # check for the latest version  
  
dev_dependencies:  
  hive_generator: ^2.0.1 # check for the latest version  
  build_runner: ^2.4.6 # check for the latest version
```

2. Definiranje objekta (Hive)

- Obstoječi model spremenimo v objekt Hive
- V terminalu poženemo ukaz:
`dart run build_runner build`
ki ustvari nov adapter

```
import 'package:hive/hive.dart';

part 'person.g.dart'; // add this line

@HiveType(typeId: 0)
class Person {
  @HiveField(0)
  final String name;
  @HiveField(1)
  final String surname;
  @HiveField(2)
  final String position;
  @HiveField(3)
  final DateTime checkInDateTime;

  Person({
    required this.name,
    required this.surname,
    required this.position,
    required this.checkInDateTime,
  });
}
```

3. Inicializacija baze

- Znotraj main metode **inicializiramo** podatkovno bazo Hive, registriramo ustvarjen adapter in uporabimo metodo ***.openBox()***

```
void main() async {  
  Fluttertoast.showToast;  
  await Hive.initFlutter();  
  Hive.registerAdapter(PersonAdapter());  
  await Hive.openBox<Person>('people');  
  runApp(MyApp());  
}
```

4. Pridobivanje iz baze

- Uredimo obstoječo kodo, da beremo (pišemo) podatke iz (v) baze/o

```
class PeopleProvider with ChangeNotifier {
    final _peopleBox = Hive.box<Person>('people');

    List<Person> get people => _peopleBox.values.toList();

    void addPerson(Person person) {
        _peopleBox.add(person);
        notifyListeners();
    }
}

class MyApp extends StatelessWidget {
    @override
    Widget build(BuildContext context) {
        return MultiProvider(
            providers: [
                ChangeNotifierProvider(create: (_) =>
                    PeopleProvider()),
            ],
            child: MaterialApp(
                title: 'Flutter App',
                home: HomeScreen(),
            ),
        );
    }
}

/// code

final peopleProvider = Provider.of<PeopleProvider>(context,
listen: false);
peopleProvider.addPerson(person);
```