



Programação para Dispositivos Móveis

Flutter – Persistência de dados

Prof. Otilio Paulo
otilio.paulo@ifpi.edu.br

SqFlite

sqflite 2.0.2+1

<https://pub.dev/packages/sqflite>

Published 19 days ago • tekartik.com Null safety

[SDK](#) [FLUTTER](#) [PLATFORM](#) [ANDROID](#) [IOS](#) [MACOS](#)

 2.8K

[Readme](#) [Changelog](#) [Example](#) [Installing](#) [Versions](#) [Scores](#)

sqflite

pub v2.0.2+1 build failing codecov 57%

SQLite plugin for [Flutter](#). Supports iOS, Android and MacOS.

- Support transactions and batches
- Automatic version management during open
- Helpers for insert/query/update/delete queries
- DB operation executed in a background thread on iOS and Android

Other platforms support:

- Linux/Windows/DartVM support using [sqflite_common_ffi](#)
- Web [is not supported](#).



SqFlite

Getting Started

In your flutter project add the dependency: [pubspec.yaml](#)

```
dependencies:  
  ...  
  sqflite:
```

Make sure to import the packages in the file you'll be working in.

```
import 'dart:async';  
  
import 'package:path/path.dart';  
import 'package:sqflite/sqflite.dart';
```



SqFlite



Opening a database

A SQLite database is a file in the file system identified by a path. If relative, this path is relative to the path obtained by `getDatabasesPath()`, which is the default database directory on Android and the documents directory on iOS/macOS.

```
var db = await openDatabase('my_db.db');
```



There is a basic migration mechanism to handle schema changes during opening.

Many applications use one database and would never need to close it (it will be closed when the application is terminated). If you want to release resources, you can close the database.

```
await db.close();
```



SqFlite

Raw SQL queries

Demo code to perform Raw SQL queries



```
// Get a location using getDatabasesPath  
var databasesPath = await getDatabasesPath();  
String path = join(databasesPath, 'demo.db');
```

```
// open the database  
Database database = await openDatabase(path, version: 1,  
    onCreate: (Database db, int version) async {  
    // When creating the db, create the table  
    await db.execute(  
        'CREATE TABLE Test (id INTEGER PRIMARY KEY, name TEXT, value INTEGER, num REAL)');  
    });
```

```
// Delete the database  
await deleteDatabase(path);
```

SqFlite - Criando banco de dados



```
int idContato;

_openBanco() async {
    var dataBasePath = await getDatabasesPath();
    String path = join(dataBasePath, 'banco.db');
    var bd = await openDatabase(path, version: 1,
        onCreate: (db, versaoRecente) async{
            String sql =
                "CREATE TABLE contatos (id INTEGER PRIMARY KEY AUTOINCREMENT, nome
VARCHAR )";
            await db.execute(sql);
        });
    print('Banco: ' + bd.isOpen.toString());
    return bd;
}
```

SqFlite - Salvando dados



```
_salvar() async {  
    Database db = await _openBanco();  
    Map<String, dynamic> dadosContato = {  
        'nome': 'Dalila Natanne',  
    };  
    setState(() async {  
        idContato = await db.insert('contatos',  
dadosContato);  
    });  
    print(idContato);  
}
```



Veja mais

<https://pub.dev/packages/sqlite>



Atividade

1. Baseado no conteúdo ministrado na aula faça um App para armazenar, alterar, consultar e excluir os dados de contatos usando SqFlite.
2. Os dados da tabela contato:
 1. id
 2. nome
 3. email
3. Poste um pdf com os código do App, juntamente com o print das telas



Próxima aula!

- Vamos explorar o widget em formato de Lista no Flutter



Obrigado
e até a
próxima!