**DATABASE**

Android sử dụng sqlite.

Chỉ có ứng dụng đó mới sử dụng được.

Được chứa trong thư mục : /data/data/<package\_name>/databases

SQLite : sử dụng tương tự cấu trúc của SQL, rút gọn một số thành phần.

DBAdapter

SQLiteOpenHelper

App

SQLiteDatabase

Để call đến database, sử dung SQLiteOpenHelper để quản lý . Thông thường sẽ viết 1 class extends từ class này.

SQLiteOpenHelper sẽ sử dụng [SQLiteDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.html) để connect đến DB

**Class SQLiteOpenHelper**

Constructors

|  |  |
| --- | --- |
| [SQLiteOpenHelper](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#SQLiteOpenHelper%28android.content.Context,%20java.lang.String,%20android.database.sqlite.SQLiteDatabase.CursorFactory,%20int%29)([Context](http://developer.android.com/reference/android/content/Context.html) context, [String](http://developer.android.com/reference/java/lang/String.html) name, [SQLiteDatabase.CursorFactory](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.CursorFactory.html) factory, int version) | Create a helper object to create, open, and/or manage a database. |
| [SQLiteOpenHelper](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#SQLiteOpenHelper%28android.content.Context,%20java.lang.String,%20android.database.sqlite.SQLiteDatabase.CursorFactory,%20int,%20android.database.DatabaseErrorHandler%29)([Context](http://developer.android.com/reference/android/content/Context.html) context, [String](http://developer.android.com/reference/java/lang/String.html) name, [SQLiteDatabase.CursorFactory](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.CursorFactory.html) factory, int version, [DatabaseErrorHandler](http://developer.android.com/reference/android/database/DatabaseErrorHandler.html) errorHandler) | Create a helper object to create, open, and/or manage a database. |

Method

|  |  |  |
| --- | --- | --- |
| synchronized void | [close](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#close%28%29)() | Close any open database object. |
| [String](http://developer.android.com/reference/java/lang/String.html) | [getDatabaseName](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#getDatabaseName%28%29)() | Return the name of the SQLite database being opened, as given tp the constructor. |
| synchronized [SQLiteDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.html) | [getReadableDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#getReadableDatabase%28%29)() | Create and/or open a database. |
| synchronized [SQLiteDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.html) | [getWritableDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#getWritableDatabase%28%29)() | Create and/or open a database that will be used for reading and writing. |
| abstract void | [onCreate](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#onCreate%28android.database.sqlite.SQLiteDatabase%29)([SQLiteDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.html) db) | Called when the database is created for the first time. |
| void | [onDowngrade](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#onDowngrade%28android.database.sqlite.SQLiteDatabase,%20int,%20int%29)([SQLiteDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.html) db, int oldVersion, int newVersion) | Called when the database needs to be downgraded. |
| void | [onOpen](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#onOpen%28android.database.sqlite.SQLiteDatabase%29)([SQLiteDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.html) db) | Called when the database has been opened. |
| abstract void | [onUpgrade](http://developer.android.com/reference/android/database/sqlite/SQLiteOpenHelper.html#onUpgrade%28android.database.sqlite.SQLiteDatabase,%20int,%20int%29)([SQLiteDatabase](http://developer.android.com/reference/android/database/sqlite/SQLiteDatabase.html) db, int oldVersion, int newVersion) | Called when the database needs to be upgraded. |

**class SQLiteDatabase**

các method cần chú ý liên quan đến delete, insert, select, ….