

Full-Text Indexing and Searching in SQLite

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Full What Now?

- Full-Text Searching: What Search Engines Offer
 - Boolean operators
 - “near” searches
 - Etc.
- Full-Text Indexing: How Search Engines Do It
 - Index built from words (other than “stopwords”) plus metadata (what page the words came from)



FTS in SQLite

- Pros
 - Fairly easy to set up
 - Works fine with Android SQLite classes
 - Faster and more powerful than wildcards
- Cons
 - Will make your database bigger
 - FTS₄ only available on API Level 11+
 - FTS₃ available for most Android versions



Creating an FTS-Enabled Table

- CREATE VIRTUAL TABLE
 - Indicates that you are using some extension to SQLite
- USING fts4
 - Or fts3
- Configuration options to tailor indexing behavior



```
@Override
public void onCreate(SQLiteDatabase db) {
    db.execSQL("CREATE VIRTUAL TABLE questions USING fts4("
        + "_id INTEGER PRIMARY KEY, title TEXT, "
        + "link TEXT, profileImage TEXT, creationDate INTEGER, "
        + "order=DESC);");
}
```

Populating an FTS-Enabled Table

- Use standard CRUD operations
- Key Limitation: No Constraints!
 - Side effect: INSERT OR REPLACE and INSERT OR IGNORE conflict-resolution variants do not work



Querying an FTS-Enabled Table

- MATCH Operator
 - Takes search expression, much as how LIKE takes a wildcard pattern
- Search Expressions
 - Keywords
 - Prefixes (SQL*)
 - Quoted phrases
 - NEAR, AND, OR, NOT operators



```
Cursor loadQuestions(Context app, String match) {
    SQLiteDatabase db=getDb(app);

    if (TextUtils.isEmpty(match)) {
        return(db.rawQuery("SELECT * FROM questions ORDER BY creationDate DESC",
            null));
    }

    String[] args={ match };

    return(db.rawQuery("SELECT * FROM questions WHERE title "
        +"MATCH ? ORDER BY creationDate DESC", args));
}
```




Is it better to avoid OR clauses in database queries?



Android: putting a webpage-generated image into a widget?



android sqlite access by different applications?



Corona App Android Key Hash For Facebook Needs Release Key




android studio - adding an existing google app engine backend to my project, on a new computer





Cordova:How to add login with googleplus using InAppBrowser




Android Recording Videos: Find out when user taps

 android studio - adding an existing google app engine backend to my project, on a new computer

 Phonegap Android don't rotate

 Custom Fonts in Android 4.1.2 Cordova (Phonegap) not working

 What is the proper way to add a reference to Android Studio v0.8.10



Phonegap Android don't rotate



Custom Fonts in Android 4.1.2
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Snippets

- snippet() Virtual Function
 - Available on FTS-enabled tables
 - Takes name of table as parameter
 - Defaults to showing search match in boldface via `` tags
 - Use results with `Html.fromHtml()` to render
 - Can configure the tags used





...to store data, notably SharedPreferences and local **SQLite** databases. And, of course, you are welcome...

Assets, Files, and Data Parsing

...**SQLite** or SharedPreferences, you do not need to worry about this problem. Android (and **SQLite**...

Assets, Files, and Data Parsing

...pertain to your entire application, notably leaking **SQLite** Cursor objects and kin. The latter represent...

Assets, Files, and Data Parsing

...locally on Android is via **SQLite**. For many applications, **SQLite** is the app's backbone, whether...

SQLite Databases

...chapter will focus on how you can directly work with **SQLite** to store relational data.

SQLite Databases

