

# Android SimpleCursorAdapter doesn't update when database changes

Asked 14 years, 11 months ago   Modified 2 years, 11 months ago

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I have an Android `ListActivity` that is backed by a database `cursor` through a `SimpleCursorAdapter`.

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When the items are clicked, a flag field in the corresponding row in the database is toggled and the view in the list needs to be updated.



The problem is, when the view that's updated goes off screen and is recycled, the old value is displayed on the view when it returns into view. The same thing happens whenever the list is redrawn (orientation changes, etc).

I use `notifyDataSetChanged()` to refresh the cursor adapter but it seems ineffective.

How should I be updating the database so the cursor is updated as well?

MD

android

database

sqlite

listactivity

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edited Dec 22, 2021 at 19:46

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General Grievance

4,977 ● 37 ● 36 ● 54

asked Dec 31, 2009 at 16:06



CodeFusionMobile

15.1k ● 25 ● 104 ● 141

6 Answers

Sorted by:

Highest score (default)



91



Call `requery()` on the `cursor` when you change data in the database that you want reflected in that `cursor` (or things the `cursor` populates, like a `ListView` via a `CursorAdapter`).

A `cursor` is akin to an ODBC client-side cursor -- it holds all of the data represented by the query result. Hence, just because you change the data in the database, the `cursor` will not know about those changes unless you refresh it via `requery()`.

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**UPDATE:** This whole question and set of answers should be deleted due to old age, but that's apparently impossible. Anyone seeking Android answers should bear in mind that the Android is a swiftly-moving target, and answers from 2009 are typically worse than are newer answers.

The current solution is to obtain a fresh `cursor` and use either `changeCursor()` or `swapCursor()` on the `CursorAdapter` to affect a data change.

answered Dec 31, 2009 at 16:39

CommonsWare 


1.0m ● 192 ● 2.4k ● 2.6k

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So what does notifydatachanged do then?

– [CodeFusionMobile](#) Dec 31, 2009 at 16:58

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- 12 There is no "notifydatachanged". If you mean notifyDataSetChanged() on Adapter, that is how the SimpleCursorAdapter tells the ListView that data was changed. To quote from the documentation, "Notifies the attached View that the underlying data has been changed and it should refresh itself." However, your problem is not with the Adapter telling the ListView about the change -- your problem is that the Adapter doesn't know the data has changed. Calling requery() is the way to address that with a CursorAdapter. – [CommonsWare](#)  Dec 31, 2009 at 17:03
- 

That makes sense now. I misunderstood the data flow.

– [CodeFusionMobile](#) Dec 31, 2009 at 17:16

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- 25 `requery()` is deprecated. You should instead issue a new `Cursor` and send it to your `CursorAdapter` via `adapter.changeCursor(myCursor)`. [See the docs](#) on the deprecation notice. – [Paul Lammertsma](#) Nov 14, 2011 at 3:30
- 



`requery` is now deprecated. from the [documentation](#):



This method is deprecated. Don't use this. Just request a new cursor, so you can do this asynchronously and update your list view once the new cursor comes back.

after obtaining a new cursor one can use the `adapter.changeCursor(cursor)`. this should update the view.

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answered Jun 15, 2011 at 12:10

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[rony l](#)

5,992 ● 5 ● 39 ● 59

Thanks for the info, I've been having a crash on Honeycomb related to `cursor.requery()`, maybe this is behind it.

– [CodeFusionMobile](#) Jun 15, 2011 at 14:09

Common situation is to change value from `onClickListener()` What puzzles me is that on the one hand, we are sending initial cursor through constructor ( i.e. query is written outside the Adapter) But on the other hand, the `onClickLister` is deifned as nested class inside the adapter. So the query for new cursor would be written inside the adapter class. This may cause duplicate code. What is the right design to write query only once in the source code.? – [Frederic Bazin](#) Sep 25, 2012 at 2:15 ✎



In case of using loader and automagically generated cursor you can call:

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```
getLoaderManager().restartLoader(0, null, this);
```



in your activity, just after changing something on a DB, to regenerate new cursor. Don't forget to also have event handlers defined:

```
@Override
public Loader<Cursor> onCreateLoader(int id, Bundle ar
    CursorLoader cursorLoader =
        new CursorLoader(this,
            YOUR_URI,
            YOUR_PROJECTION, null, null, null)
    return cursorLoader;
}

@Override
public void onLoadFinished(Loader<Cursor> loader, Curs
    adapter.swapCursor(data);
}

@Override
public void onLoaderReset(Loader<Cursor> loader) {
    adapter.swapCursor(null);
}
```

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answered Jul 18, 2012 at 22:54


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siefca

1,147 ● 14 ● 17

- 
- 2 Tried half a dozen different things from around Stack Overflow and this was the one that finally worked for me. Thank you! – [Rudism](#) May 2, 2013 at 1:36
- 
- 1 This is exactly the answer I was looking for, using a simple adapter, and calling swapCursor onLoadFinished. – [Matt](#) Dec 27, 2013 at 15:48
- 
- 1 Worked, but I had to add this: As the listview Fragment registers a user click causing an update of values of a row

that is then to be inserted into DB, the new cursor automatically created by the new cursorloader in onCreateLoader(), had to be passed to the (in my case) custom-adapter extending simpleCursorAdapter, because I found no other way to notify the method getView() (doing the view update) about the new cursor. GetView() used the old cursor until the whole fragment was restarted. Hence I made a setCursor() in the customadapter and called this from onCreateLoader(). Then it worked. – [carl](#) Apr 14, 2014 at 18:11 

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I am not clear if you set the `autoRequery` property of CursorAdapter to `true`.

1



The adapter will check the `autoRequery` property; if it is `false`, then the cursor will not be changed.



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edited Sep 21, 2012 at 23:46



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[avpaderno](#)

29.6k ● 17 ● 78 ● 94


answered Sep 12, 2012 at 8:37



[gjican](#)

11 ● 1

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`protected void init (Context context, Cursor c, boolean autoRequery)` *This method is deprecated. Don't use this, use the normal constructor. This will be removed in the future.* – [Mussa](#) May 27, 2015 at 6:27 

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requery() is already deprecated, just implement the simple updateUI() method like this in your

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CursorAdapter's child class and call it after data updates:



```
private void updateUI(){
    swapCursor(dbHelper.getCursor());
    notifyDataSetChanged();
}
```

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answered Feb 11, 2015 at 22:11

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Jaroslav

263 ● 4 ● 6



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It's easy.



```
private Db mDbAdapter;
private Cursor mCursor;
private SimpleCursorAdapter mCursorAd;

.....
//After removing the item from the DB, use this
.....

mCursor = mDbAdapter.getAllItems();
mCursorAd.swapCursor(mCursor);
```

Or use CursorLoader...

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answered Oct 27, 2015 at 11:20

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Shwarz Andrei

687 ● 14 ● 17