

CSc 317

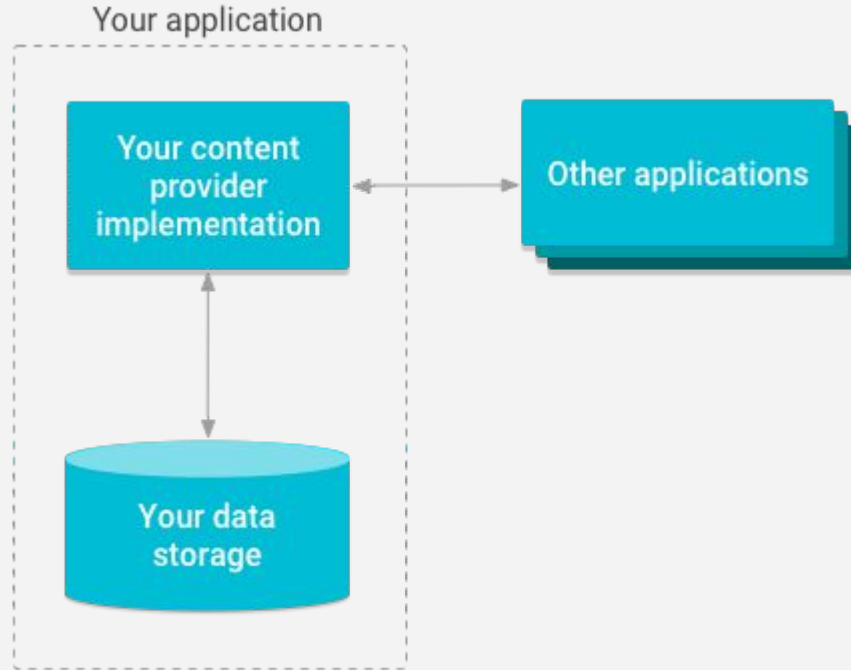
Content Provider - Contacts



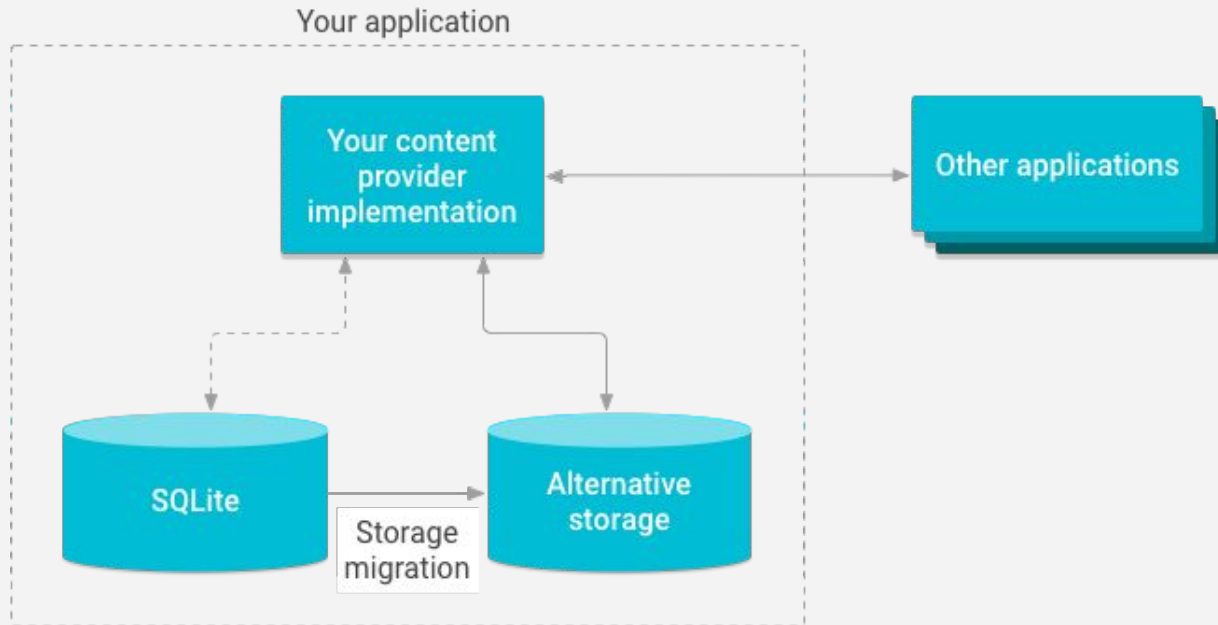
Content Providers

- From the docs:
 - Help an application manage access to data stored by **itself**, access data stored by **other apps**, and provide a way to **share data** with other apps
 - Encapsulate the data, and provide mechanisms for defining data security
 - The standard interface that connects data in **one process** with code running in **another process**

Content Providers



Content Providers



Content Providers

- For this next assignment, your app should *use* a content provider
- Won't be required to create one for PA 8
 - Possibly create one for final project

Using a Content Provider

```
Cursor cursor = activity.getContentResolver().query(
    ContactsContract.Contacts.CONTENT_URI, null, null, null, null);
while (cursor.moveToNext()) {
    String id = cursor.getString(
        cursor.getColumnIndex(ContactsContract.Contacts._ID));
    String given = cursor.getString(
        cursor.getColumnIndex(ContactsContract.Contacts.DISPLAY_NAME));
    System.out.println(given + " :: " + id);
}
cursor.close();
```

Using a Content Provider

```
. . .
Cursor phones = getContentResolver().query(
    ContactsContract.CommonDataKinds.Phone.CONTENT_URI, null,
    ContactsContract.CommonDataKinds.Phone.CONTACT_ID + " = " + id,
    null, null);
while (phones.moveToNext()) {
    String phoneNumber = phones.getString(phones.getColumnIndex(
        ContactsContract.CommonDataKinds.Phone.NUMBER));
    contactInfo += "Phone: " + phoneNumber + "\n";
}
phones.close();
```

The goal:



ContentProvidersTest

- Run the application
- Then, go to settings, and give the application permission to view contacts
- Add some dummy contacts
- Also, note this in the Manifest file:

```
<uses-permission  
    android:name="android.permission.READ_CONTACTS" />
```



ContentProvidersTest

- Three TODOs in the code
- Start with the one in `ContactsFragment`
- Then the Two in **MainActivity**
- Then go to **ContentInfoFragment**

