第11章

UI

CrimePagerActivity

ViewPager

activity CrimeFragment activity ViewPager

ViewPager

11-1

11-1 Crime 11-2 CrimePagerActivity CriminalIntent CrimeActivity ViewPager activity CriminalIntent CrimeFragment Crime CrimeFragment CrimePagerActivity ViewPager

ViewPager

adapter;

CrimeListFragment.onListItemClick(...)
CrimeActivity。

CrimePagerActivity

11-2 CrimePagerActivity

11.1 CrimePagerActivity

```
CrimePagerActivity FragmentActivity CriminalIntent

ViewPager

FragmentActivity CrimePagerActivity

onCreate(Bundle) mViewPager

ViewPager 11-1
```

```
11-1 ViewPager CrimePagerActivity.java
```

```
public class CrimePagerActivity extends FragmentActivity {
    private ViewPager mViewPager;

@Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
    }
}
```

```
11.1.1
```

XML

Android

```
XML
                                           component
                                                                   ID ViewPager
                                                                                    ID
                  FragmentManager
                                                 fragment
                                                    ID
ViewPager
                fragment
    ViewPager
                            ID
           ViewPager
                                  mViewPager
    ID ViewPager
    ViewPager activity
            ID
                 ID
                                    ID
                                                          res/values
                                                                           XML
                             res/values/ids.xml Android XML
                                                                                  ID
                   viewPager ID
                                             11-2
         11-2
                            ID res/values/ids.xml
    <?xml version="1.0" encoding="utf-8"?>
    <resources xmlns:android="http://schemas.android.com/apk/res/android">
        <item type="id" name="viewPager" />
    </resources>
            ID
                                 ViewPager
                                               CrimePagerActivity.java
                                                                              ViewPager
                                      11 - 3
         11-3
                                           CrimePagerActivity.java
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        mViewPager = new ViewPager(this);
        mViewPager.setId(R.id.viewPager);
        setContentView(mViewPager);
    }
   ViewPager
                                 Fragment
                                                   ViewPager
              SDK
                                                  "ViewPager
```

11.1.2 ViewPager PagerAdapter

```
ViewPager
                                     AdapterView ListView
                                                                      AdapterView
    Adapter
                                  ViewPager
                                                   PagerAdapter
                AdapterView Adapter
                                                     ViewPager PagerAdapte
                             PagerAdapte
                                                ——FragmentStatePagerAdapter
   FragmentStatePagerAdapter
getCount() getItem(int)
                                 getItem(int)
                                                                           Crime
                                                       crime
                                   crime
                                              CrimeFragment
      CrimePagerActivity
                                           11-4
                                                             ViewPager pager adapter
          getCount() getItem(int)
        11-4
                   pager adapter CrimePagerActivity.java
    public class CrimePagerActivity extends FragmentActivity {
        private ViewPager mViewPager;
        private ArrayList<Crime> mCrimes;
        @Override
        public void onCreate(Bundle savedInstanceState) {
            super.onCreate(savedInstanceState);
           mViewPager = new ViewPager(this);
           mViewPager.setId(R.id.viewPager);
           setContentView(mViewPager);
           mCrimes = CrimeLab.get(this).getCrimes();
           FragmentManager fm = getSupportFragmentManager();
           mViewPager.setAdapter(new FragmentStatePagerAdapter(fm) {
               @Override
               public int getCount() {
                   return mCrimes.size();
               @Override
               public Fragment getItem(int pos) {
                   Crime crime = mCrimes.get(pos);
                   return CrimeFragment.newInstance(crime.getId());
               }
           });
       }
    }
                                                        crime ArrayList
                                           CrimeLab
        activity FragmentManager
                     adapter
                              FragmentStatePagerAdapter
FragmentState- PagerAdapter
                                            FragmentManager
FragmentStatePagerAdapter
                                                     ViewPager
```

```
getItem(int)
                                                                    fragment
                                 fragment
                                               activity
                                  FragmentManager
                                                       fragment
                                                                         activity
Viewpager
              fragment
                                      getCount()
    Pager adapter
    getItem(int)
                                                                 Crime
Crime
            ID
                                        CrimeFragment
11.1.3
                           CrimePagerActivity
                   CrimeActivity
                                                   CrimePagerActivity
          CrimeListFragment
                                                                     CrimeListFragment
        CrimePagerActivity
                                              CrimeActivity
             CrimeListFragment.java
                                                  onListItemClick(...)
CrimePagerActivity
                                 11-5
        11-5
                       CrimePagerActivity CrimeListFragment.java
    @Override
    public void onListItemClick(ListView l, View v, int position, long id) {
        // Get the Crime from the adapter
        Crime c = ((CrimeAdapter)getListAdapter()).getItem(position);
        // Start CrimeActivity
        Intent i = new Intent(getActivity(), CrimeActivity.class);
        // Start CrimePagerActivity with this crime
        Intent i = new Intent(getActivity(), CrimePagerActivity.class);
        i.putExtra(CrimeFragment.EXTRA CRIME ID, c.getId());
        startActivity(i);
    }
                     manifest
                                            CrimePagerActivity
               11-6
                             AndroidManifest.xml
                                                       CrimePagerActivity
            CrimeActivity
        11-6
                                                            AndroidManifest.xml
                   CrimePagerActivity manifest
    <?xml version="1.0" encoding="utf-8"?>
    <manifest ...>
      <application ...>
        <activity
          android:name=".CrimeActivity"
          android:label="@string/app_name" >
        </activity>
        <activity android:name=".CrimePagerActivity"
          android:label="@string/app name">
        </activity>
```

```
</application>
    </manifest>
                                                  CrimeActivity.java
        CriminalIntent
                                Crime #0
                                                                           crime
                                                          ViewPager
setOffscreenPageLimit(int)
               ViewPager
                                                                            Crime
                            Crime
                         PageAdapter
   ViewPager
                                                                ViewPager
      Crime
      CrimePagerActivity.onCreate(...)
                                                                 crime ID
                                                                                     crime
                       Crime
                                    mId intent extra crimeId
          Crime
                                                 11-7
         11-7
                                     CrimePagerActivity.java
    public class CrimePagerActivity extends FragmentActivity {
        @Override
        public void onCreate(Bundle savedInstanceState) {
            FragmentManager fm = getSupportFragmentManager();
            mViewPager.setAdapter(new FragmentStatePagerAdapter(fm) {
            });
            UUID crimeId = (UUID)getIntent()
                .getSerializableExtra(CrimeFragment.EXTRA_CRIME_ID);
            for (int i = 0; i < mCrimes.size(); i++) {
                if (mCrimes.get(i).getId().equals(crimeId)) {
                    mViewPager.setCurrentItem(i);
                    break;
                }
            }
        }
    }
        CriminalIntent
                                                      Crime
                                                                             activity
        Crime
                                  ViewPager.OnPageChangeListener
           11-8
         11-8
                   OnPageChangeListener
                                                    CrimePagerActivity.java
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

11

```
mViewPager = new ViewPager(this);
        mViewPager.setId(R.id.viewPager);
        setContentView(mViewPager);
        mCrimes = CrimeLab.get(this).getCrimes();
        FragmentManager fm = getSupportFragmentManager();
        mViewPager.setAdapter(new FragmentStatePagerAdapter(fm) {
        });
        mViewPager.setOnPageChangeListener(new ViewPager.OnPageChangeListener() {
           public void onPageScrollStateChanged(int state) { }
           public void onPageScrolled(int pos, float posOffset, int posOffsetPixels) { }
           public void onPageSelected(int pos) {
               Crime crime = mCrimes.get(pos);
               if (crime.getTitle() != null) {
                   setTitle(crime.getTitle());
            }
        });
    }
        OnPageChangeListener
                                   ViewPager
        Crime
                              CrimePagerActivity
                 11-8
onPageSelected(...)
                               onPageScrolled(...)
  onPageScrollStateChanged(...)
        CriminalIntent
                                                       activity
Crime
           mTitle
                                     ViewPager
11.1.4
         FragmentStatePagerAdapter FragmentPagerAdapter
   FragmentPagerAdapter
                                                   PagerAdapter
FragmentStatePagerAdapter
                                                                            fragment
        FragmentStatePagerAdapter
                                                     fragment
                                                                               fragment
  activity FragmentManager
                                        FragmentStatePagerAdapter
                                                                            " state"
          fragment
                              onSaveInstanceState(Bundle)
                                                                     Bundle
                                                              fragment
                                                                            11-3
                FragmentPagerAdapter
                                                                            fragment
FragmentPagerAdapter
                                       detach(Fragment)
                                                                    remove(Fragment)
```

11.1

 ${\tt FragmentPagerAdapter}$

fragment

fragment

FragmentManager

FragmentPagerAdapter

fragment

11-4

11-3 FragmentStatePagerAdapter fragment

adapter

FragmentStatePagerAdapter

CriminalIntent

crime

FragmentStatePagerAdapter

fragment

FragmentPagerAdapter

ViewPager

fragment

activity

fragment

11.2 ViewPager

ViewPager PagerAdapter

ViewPager

□ Android

ViewPager

PagerAdapter

ViewPager-PagerAdapter

AdapterView-

Adapter

ViewPager

AdapterView

AdapterView

ViewPager

Gallery

Fragment

CriminalIntent

AdapterView

Adapter

_ __

View

fragment

FragmentManager

fragment

Gallery

Adapter fragment

PagerAdapter

Adapter

ViewPager PagerAdapter Ada

Adapter

getView(...) PagerAdapter

public Object instantiateItem(ViewGroup container, int position)

public void destroyItem(ViewGroup container, int position, Object object)

public abstract boolean isViewFromObject(View view, Object object)

PagerAdapter.instantiateItem(ViewGroup, int)

pager adapter

ViewGroup

destroyItem(ViewGroup, int,

Object) pager adapter

instantiateItem(ViewGroup, int)

PagerAdapter

```
ViewPager
                                                                         ViewPager
   isViewFromObject(View, Object)
                                            Object
                                                         instantiateItem (ViewGroup,
int)
                             ViewPager
                                           instantiateItem(ViewGroup, 5)
Α
                       View
                                   5
                                                  isViewFromObject(View, A)
                     false
   true
      ViewPager
                                                PagerAdapter
  PagerAdapter
  PagerAdapter
                                  instantiateItem(ViewGroup, int)
  fragment
                                     fragmentObject
                                                            isViewFromObject(View,
Object)
    @Override
    public boolean isViewFromObject(View view, Object object) {
       return ((Fragment)object).getView() == view;
    }
                          ViewPager
                                                     PagerAdapter
                      FragmentPagerAdapter FragmentStatePagerAdapter
```