# What is a ViewPager?

A ViewPager is used when you want to swipe between different fragments.

# Threes things when using ViewPager

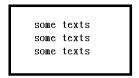
1. ViewPager 2. Fragment 3. FragmentPagerAdapter

From my perspective, it looks like this:

ViewPager: Swipe between Pages (Fragments)



Fragment: things to display



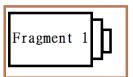
or



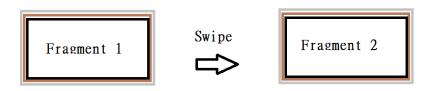
FragmentPagerAdapter:

Decide the Number of Fragments

Decide the Order of the Fragments



Add Together:



### How to use ViewPager?

#### Step 1. Add ViewPager in your .xml file

```
<android.support.v4.view.ViewPager
android:id="@+id/myViewPager"
android:layout_width="match_parent"
android:layout_height="wrap_content">
</android.support.v4.view.ViewPager>
```

### Step 2. Define the Fragments which you want to use

#### Here is an example

```
public class FirstFragment extends Fragment {
   // Store instance variables
   private String title;
   private int page;
   // newInstance constructor for creating fragment with arguments
   public static FirstFragment newInstance(int page, String title) {
       FirstFragment fragmentFirst = new FirstFragment();
       Bundle args = new Bundle();
       args.putInt("someInt", page);
       args.putString("someTitle", title);
       fragmentFirst.setArguments(args);
       return fragmentFirst;
   }
   // Store instance variables based on arguments passed
   @Override
   public void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       page = getArguments().getInt("someInt", 0);
       title = getArguments().getString("someTitle");
   }
   // Inflate the view for the fragment based on layout XML
   public View onCreateView(LayoutInflater inflater, ViewGroup container,
          Bundle savedInstanceState) {
       View view = inflater.inflate(R.layout.fragment_first, container, false);
       TextView tvLabel = (TextView) view.findViewById(R.id.TextView);
       tvLabel.setText(page + " -- " + title);
       return view;
   }
```

#### The .xml layout for FirstFragment:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical" android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Large Text"
        android:id="@+id/textView"
        android:layout_gravity="center_horizontal" />
</LinearLayout>
```

#### Step 3. Setup your FragmentPagerAdapter (Adapter:接合器)

It determines how many pages exist and which fragment to display for each page

Here is an example:

```
public class MainActivity extends AppCompatActivity {
   public static class MyPagerAdapter extends FragmentPagerAdapter {
   private static int NUM_ITEMS = 3; // total number of pages
       public MyPagerAdapter(FragmentManager fragmentManager) {
           super(fragmentManager);
       }
       // Returns total number of pages
       @Override
       public int getCount() {
           return NUM_ITEMS;
       // Returns the fragment to display for that page
       @Override
       public Fragment getItem(int position) {
          switch (position) {
          case 0: // Fragment # 0 - This will show FirstFragment
              return FirstFragment.newInstance(0, "Page # 1");
          case 1: // Fragment # 0 - This will show FirstFragment different title
              return FirstFragment.newInstance(1, "Page # 2");
          case 2: // Fragment # 1 - This will show FirstFragment
              return FirstFragment.newInstance(2, "Page # 3");
          default:
              return null;
          }
       }
       // Returns the page title for the top indicator
       @Override
       public CharSequence getPageTitle(int position) {
           return "Page " + position;
       }
   }
```

#### Last step: Apply the Adapter

```
public class MainActivity extends AppCompatActivity {
   FragmentPagerAdapter adapterViewPager;

@Override

protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_home);
    ViewPager mViewPager = (ViewPager) findViewById(R.id.myViewPager);
    FragmentPagerAdapter mfragmentPagerAdapter =
    new MyPagerAdapter(getSupportFragmentManager());
    mViewPager.setAdapter(mfragmentPagerAdapter);
}

// ...
}
```

#### Reference website:

 $https://github.com/codepath/android\_guides/wiki/ViewPager-with-FragmentPagerAd\ apter$